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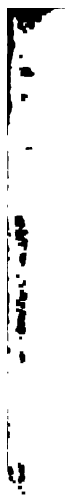
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THE AUSTRALASIAN MEDICAL GAZETTE:

The Journal of the Australasian Branches of the
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EDITED FOR THE PROPRIETORS BY

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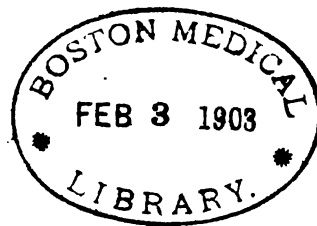
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AUSTRALASIAN MEDICAL GAZETTE.

MEDICAL MATTERS IN VICTORIA.

THE ANNUAL ADDRESS.

By J. E. Neild, M.D., Ch.B., Melbourne.

Retiring President Victorian Branch B.M.A.

*Read at the Annual Meeting of the Victorian Branch
of the British Medical Association.*

We have had a quiet year, but then there have been few of us to quarrel, even if we had been so inclined.

We have met in Council and we have met in monthly meeting, and the unity of our gatherings has been maintained, consequently there has been an agreement in discussion, which I can only describe as beautiful.

We thus close the year at peace with all men for the present, and, our minds being undisturbed by pyrexial influences, we can the more calmly apply ourselves to the work of passing, in brief review, some of the matters which have occupied the attention of the profession during the year now nearing its close.

But before doing so I would ask you to pardon me if I parenthetically digress by saying a few words about myself.

When, some eighteen months ago, I was asked to take the position of President of the Victorian Branch of the British Medical Association I was indisposed to do so, not because I felt no interest in the success of the Branch, in the planting of which, I may say, I took a prominent part twenty years ago, and of which I had been Honorary Secretary and President, but because I had virtually for some time ceased to occupy any official position in its organisation. I was reminded that there had recently occurred a sort of cataclysm in the Branch, and that the integrity of the Association was imperilled, and that I, as one of the founders, might be able to restore its cohesion and strength. I therefore acceded to the request made to me, and I can but say that I have done my best.

The charming courtesy of those who have attended the meetings during the year has been beyond reproach, and to them I offer my very grateful thanks, and I can only regret that the Branch should have been concerned in a matter which, regarded from any point of view, added nothing to its dignity, its reputation, or its usefulness.

As a scientific body a wide field is open to us for the exercise of our legitimate functions, and I can but hope that for the future we shall confine ourselves to what is truly beneficial to humanity and advantageous to ourselves as a brotherhood, having the health of the community in our collective keeping.

Looking back upon the past year, and limiting our reflections principally to local matters, although, nevertheless possessing an interest common to all scientific workers, we find ourselves embarrassed by the multitude of subjects which claim our retrospective attention. It is hardly too much to say that the question of *sanitation* stands foremost in the list. Those who, like myself, have a considerable burden of years upon their shoulders, can remember very well the time when, practically, no attention was given to the observance of conditions necessary to the prevention of disease and the preservation of health. The physician was regarded by most people as a man to look wise, feel pulses, and give large quantities of medicine; and he himself, with rare exceptions, limited himself to the exercise of these simple duties. Hygiene, as we now know it, possessed no meaning to the average mind. Boards of health had no substantive existence, and those members of the profession who busied themselves about water supply, the regular removal of filth, the purification of streams, the construction of dwellings in which light and pure air were provided for, and in which house-refuse was regularly removed, were looked upon as doctrinaires or as eccentric faddists. So also with reference to the wholesomeness of food and drink. Adulteration was openly practised, and only nominally punished, and the public, who suffered both in health and pocket, were slow to believe that any harm came to them from these frauds. Even at this day, among educated and otherwise intelligent people, there is still an incomprehensible disregard of the danger incurred by the consumption of poisonous food, although the risks they run are pointed out by the profession.

In respect of *diet* as an adjunct to strictly medical treatment, there has come about a great change. There was a time, and that not so long ago, when patients were allowed to eat what they pleased, both as to quality and quantity, and though some measure of reform has been accomplished in this matter, the reform is not complete either in adults or children. Young people are allowed to stuff themselves to their heart's content and to their stomach's

discomfort, and especially in the case of infants the practice of overfeeding, and wrong feeding, continues to exist. The number of artificial foods that are crammed into the alimentary canals of these unfortunate creatures add greatly to the infantile mortality, as I have reason to know from the number of necropsies I have performed since the Infant Life Protection Act came into force.

In strictly medical, or, as it would be more correct to term it, drug treatment there has been a great change of late years. Many of the old preparations have been swept away and new ones substituted, not always, as I think, with advantage. And here I may remark that the enormous number of pills, tabloids, ovoids, and other forms in which nearly every drug is now manufactured by the wholesale druggists, has unquestionably extended the consumption of medicine in these forms, more especially by the general public, who, knowing both the nature and the quantity of the drug they are swallowing, are enabled to treat themselves without the interposition either of the doctor or the pharmacist. Nevertheless, the quack still thrives; and he thrives because of his mystery. He demonstrates practically the truth of the very old adage, *Omne ignotum pro mirifico*.

The treatment of certain diseases by what is comprehensively known as the *serum* method, appears to maintain the favour with which it was at first received. Its efficacy has been enthusiastically proclaimed, but, at the risk of being pronounced unreasonably sceptical, I am obliged to declare that I cannot but regard this treatment as still only on its trial. If it is found to maintain the specific virtues with which it is credited so much the better. Up to the present I cannot but regard it as requiring confirmatory evidence in many cases. Of surgical antisepsis as propounded by its apostle, Lord Lister, there is no need to speak with hesitation. Its success has been established without question, and it has changed completely both the method and the results of operative surgery. With anæsthesia and asepsis in operative surgery, surgical procedure has been made possible in cases which, little more than half a century ago, were past the limits of recovery, and which it was regarded as criminal to treat with the knife. Conservative surgery has thus been made possible where it was formerly not attempted by the most experienced surgeons. The Röntgen light, moreover, has lent a valuable aid in diagnosing conditions of an obscure kind, which could not be made clear save by much suffering and mutilation.

It would be superfluous at this day to speak of the microscope as an adjunct in diagnosis. It is so indispensable in certain bacteriological enquiries that the wonder is certain forms of disease could formerly be treated otherwise than empirically. And here it is only right to speak of the progress which has recently been made with the pathology of tuberculosis, and more especially to express satisfaction at the consequent results of this enquiry in the treatment of that disease which I need hardly say is now, or at least should be, conducted on principles wholly different from those formerly regarded as indispensable. I am not sure, however, that the inclusion of non-medical persons in the committees appointed to manage the proposed consumptive sanatoria is an unmixed advantage; for while their intentions might be beyond cavil, their amateur efforts might work mischief. The special instruction of nurses, however, both in these and cognate institutions, might possibly act as valuable counteracting influences.

Touching the subject of our hospitals, there is not much new to be said save that the Contagious Diseases Hospital is not completed, and apparently is not likely to be completed. Such portion of it as is finished stands in the grounds of the Yarra Bend Asylum, a mournful memento of the scriptural warning of what happens to persons who commence to build houses without first sitting down and counting the cost thereof. The Government will tell us it is no affair of theirs to provide the money for its completion, and the public will say we contributed twenty thousand pounds, and that should have been sufficient to complete it, and everybody will write or want to write to the newspapers to say what should be done. Meantime the fever-stricken people are dying, and we shall wish we were ruled by an autocrat who could order things on the *sic volo sic jubeo* principle; and we shall also wish we had a new general hospital in place of the patchwork institution which should have been razed twenty years ago. From hospitals we may speak of medical schools, and our own Medical School of the University necessarily claims chiefest attention. It has recently undergone some changes, some of them not for the better, but at any rate it is nevertheless still the most flourishing department of our principal seat of learning. It will probably suffer in common with the other sections as the result of the financial cloud which has shadowed the chest; and by the time this has passed away we shall perhaps have learnt wisdom sufficient to look more

sharply after the internal management of our public institutions.

Once in this great city we had but one medical society, now we have four. I do not know if this large number of medical brotherhoods has enlarged the fraternal feeling which characterised the bulk of the profession forty years ago; I question if it has. There is talk of forming a large medical association out of a union of the separate societies. This association, as I understand, is to take the place of the Congress which occasionally meets. But I also think it will not prove the success predicted for it; matters were better left as they are. Then as to medical books and periodicals. Of these we have a superfluity. They tell one much that one already knows, and much more that one does not want to know. It is true that the best of us are willing to be students all our lives, if only those who essaying to teach us will tell us things that are worth knowing, but it is not always that they do.

And now I have to apologise for mentioning a number of matters with which you are all familiar; but it is not a bad thing sometimes briefly to go over trodden ground, if only to be sure that we are making at least some headway. In our copybooks we used to write *Non progredi est regredi*, and this adage, although commonplace and old, is still true, and will continue to be true; and I trust that, with our progress, there will also be good fellowship, good feeling, and enduring good faith in one another.

A SERIES OF TWENTY-SEVEN CASES OF OPERATION ON THE GALL BLADDER AND BILE DUCTS.

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In looking over my histories of operation cases, I noticed that there was a considerable number of cases which had a more or less direct relation to the gall bladder and bile ducts, and some of them, too, with such perplexing histories and associated with such peculiar conditions, that I felt that here was to be found material for opening up a profitable discussion on a subject which comes within the ken of every professional man.

The surgeon has a certain advantage over the physician in that he has greater opportunities for intra abdominal examination in those serious cases which recover, whereas the physician, unless the patient dies under his

care can but surmise what the condition is, and at times remains in doubt how or why his patient has recovered.

In this series of cases I have purposely only included those in which the symptoms usually associated with gallstone disease were present. That is to say, there were attacks of biliary colic and in some cases jaundice as well.

I have divided them under the following headings, but I shall speak only of those cases which present features of special interest.

Cholechochotomy for gall stones, 5 cases	2 in common hepatic duct	1 recovered 1 malignant died
	1 in right and left hepatic and common hepatic duct	recovered
	2 in common bile duct	recovered
Rupture of gall bladder	1 patient, aged 73, gall stone removed	recovered
Malignant disease of head of the pancreas	2 cases	2 recovered dying a few months after
Cholecystotomy 17 cases	4 acute suppurative cholecystitis and cholangitis	2 recovered 2 died
	5 acute suppurative cholecystitis	5 recovered
	3 severe pericholecystitis and impacted gall stones	3 recovered
	4 simple uncomplicated	4 recovered
	1 distended gall bladder colic, no gall stone	1 recovered
Biliary colic due to	1 attachment of floating kidney to common bile duct	1 recovered
	1 pressure of enlarged portal glands, syphilitic	1 recovered

You will observe that there are seven cases in all, three of whom died. Two died because the acute septic conditions for which operation was conducted had already poisoned them, and one associated with malignant disease died rather suddenly from a cause I was not precisely able to ascertain, but judging from the enfeebled condition of the patient, I should say that very probably she died from pulmonary thrombosis.

Interesting as I am sure you would find the histories of these cases, I feel that I must confine myself to those which have a more or less direct bearing on the remarks which I would wish to make in connection with the subject of cholecystitis.

Cases of cholechochotomy are difficult as a rule and I feel that it would be unjust to my surgical colleagues were I to pass over them without comment.

In two of the five cases of cholechochotomy the gall stones were found in the common bile duct, and were extracted by incising the duct.

In one there were stones in the gall bladder in the common hepatic and also the right and left hepatic ducts. The common hepatic duct was opened and stones some fifteen in number were removed. In the fourth stones were removed from the common hepatic and common bile duct.

The fatal case I have already mentioned occurred in a woman of 54 with malignant disease of the gall bladder. She had intermittent jaundice and very great pain. I thought that I might be able to relieve her by getting rid of the stones. I was not aware that she was suffering from malignant disease before I operated. At half past one she was seen by Dr. Heggaton and seemed well with a pulse of 104, and she died shortly after three.

In none of these cases did I make any attempt to suture the bile duct. In three of them so matted were the surrounding structures it would have been impossible to do so. In the other two it was possible. A rubber drainage tube was placed with one end on the opening in the duct, and outside and inside this tube were placed gauze drainage wicks. If septic symptoms had subsided the drainage was discarded after a few days when a firm lymph track had been established.

It is well known that linear incision of a mucous track like the urethra heals with a fine linear scar, and is not followed by stricture. Arguing from this I acted as I did, nor have I had any reason to be disappointed with the result.

Suture is unnecessary and often impossible. It requires a larger incision, necessitates a greater amount of handling and materially prolongs the operation. Suture also offers a fair chance of diminishing the calibre of the duct.

These cases necessitating choledochotomy are often associated with a pathological condition of the bile ducts due to backward pressure and infective processes, so that drainage, free drainage of the ducts is an absolute necessity and a sound surgical procedure.

Even in those cases where men have sutured, the duct leakage has frequently taken place, and in some cases where suture has been adopted without drainage, leakage has occurred and has been followed by death. It is evident then that suture of the duct is not necessary, and unless it be backed up by good drainage, it is likely to be productive of fatal results. Mayo reports eleven cases of choledochotomy. In four he sutured and drained, and in the remaining seven he did not suture. All recovered.

I shall next direct your attention to the

acutely septic cases. There were eight, and two of them died. One, a man of 38 years, became suddenly ill with rigors. He was ill for about ten days before I saw him. He was slightly jaundiced and tender over the gall bladder and hepatic region. He had no gall stones, and though I drained his gall bladder bile never flowed freely, and his condition was in no wise abated. He merely became less jaundiced, and died in about three weeks time. There was no *post-mortem*. I do not know what was the origin of the attack—it was probably intestinal. A man of 50 years had an attack of biliary colic twenty years ago, and another six years after that. During the past twelve months the attacks have been very much more frequent. He was continuously ill for three weeks before admission. He had rigors about every eighteen hours after he was admitted to hospital. He was operated on the third day after admission. I admit that this was three days lost. On the last day he for the first time showed some slight jaundice. He had very marked tenderness over the gall bladder. His pulse was 130, and his temperature 102°, and he looked very ill indeed. After some difficulty his gall bladder was found deeply situated and hidden by omentum and transverse colon. It was extremely small, and distended with gas in the upper part, so that I was almost persuaded that I was dealing with intestine. On opening it gas escaped, and in the lower part there was about a teaspoonful of very fetid pus. No gall stones could be found. He recovered rapidly, but returned in two months' time with dragging pains and a history of a rigor. I opened, and found no evidence of gall stones in the ducts, but there were necessarily many adhesions which I separated. He at the present time looks well, but he still has pain which he asserts is not at all like the old trouble, and is, I believe, to be attributed to adhesions, inasmuch as he is gradually getting better. Harris states that this often occurs for some time after operating on shrunken gall bladders. In one other case did I experience a like result. The pains left gradually and have not returned after eighteen months. Four other cases were operated on, when rigors and high temperature, and offensive purulent material and gall stones were found in the gall bladder. One of the patients with malignant disease of the head of the pancreas gave a history of old attacks of biliary colic, and no stones were present. She was extremely jaundiced. The other was slightly jaundiced, but the whole of the pancreas was involved. The bile duct was affected by pressure only.

It certainly seems odd that in these two cases there was a history of old standing biliary colic, and the presence of gall stones is said to have a marked effect on the production of cancer and chronic inflammatory affections in this region. Both of these patients died a few months afterwards.

A young unmarried woman, aged 22 years, gave a history of attacks of colicky pain in the epigastrium for the last eight or nine years. These attacks lasted for one and a half to three hours, and came at intervals of from two to six weeks. The pain was felt radiating out from the epigastrium. She was never jaundiced. The attacks so far as she knew bore no relation to her meals or to food taken. On the day following the attack practically all symptoms of it had vanished. On opening the gall bladder I found the fundus about twice the normal size, elongated and sagging downward. The bile was thick and treacley; the cystic duct was dilated in its upper part. A No. 4 sound could be passed. No gall stones were present. Part of the fundus was cut off and the raw edge was attached to the abdominal wall. I judged that by shortening and straightening the gall bladder, the bile could the more easily escape, as the thickened condition was probably due to stasis. Since then, five months ago, the patient has been quite well.

This case showed a fair amount of intermittency, but the symptoms of the case I am about to mention were of a fairly mild, but persistent character. He was a man sixteen stone in weight and 33 years of age. For the past six months he had been troubled with more or less pain in the region of the gall bladder, and for the last six weeks he had been jaundiced; the jaundice gradually increasing in degree. He had, I learned, a slight and varying temperature all through, and for a short period before operation it had ranged as high as 102° . His gall bladder held about half a pint of thick bile, which was not purulent. There were no gall stones, and only a few adhesions about the neck of the gall bladder. The gall bladder was drained and the temperature and jaundice subsided. He left hospital in two months time quite well. A few weeks after this he became ill with a profuse and frequent diarrhoea, and in the interval preceding this he complained greatly of his want of appetite and his weakness. I saw him a few hours before death, I could discover neither sign nor symptom of liver trouble. No *post mortem* could be obtained, but I was very much inclined to think that both illnesses originated in some intestinal condition of a septic character.

I hope I do not assume too much when I say that there is a common impression held by many that the intense pain of biliary colic is due to the effort on the part of the biliary passages to expel gall stones. This is, probably, in the great majority of cases, a totally erroneous view, and most likely the correct one is that each of the attacks represents an attack of cholecystitis. Owing to the inflamed condition of the mucous membrane of the gall bladder, and particularly the bile passages, there is a resistance to the outflow of the bile and mucoid secretion. The increase in tension thus occasioned immediately excites within the tender gall bladder a reflex spasm, a biliary colic.

Spasm of the urinary bladder will take place when ulcer or acute cystitis is present. Attacks of renal colic are not uncommon in cases where the stone does not engage the ureter. A man may have stone in the kidney for years without giving rise to any pain whatever. How often, on the other hand, has a kidney been cut down upon for spasmodic colicky attacks, a marked symptom of stone when no stone has been present. We can only infer then that these attacks of pain are due not necessarily to a blocking obstruction, but to a reflex spasm, brought on by perhaps an amount of interference sufficient to produce but a slight increase in the pressure on the irritated epithelial surface behind it.

The very fact that, in some, biliary colic has been present in a marked degree when no gall stones have been present, is sufficient to induce one to believe that other conditions besides gall stones must bear a causal relation to the colic. This may be due to inspissated bile and to pressure from without, but considering the number of cases in which varying degrees of an ulcerative process have been found, there is a strong presumptive evidence that pathological changes in the mucous membrane or the wall of the gall bladder are a very strong factor in the production of biliary colic.

Naunyn and Stolz state that the bile is not absolutely aseptic, but that organisms and usually bacillus coli, are few in number, very attenuated and only obtained by sowing the culture medium with large quantities of biliary fluid. If streptococci are carefully introduced into a normal gall bladder they are got rid of fairly quickly, but if the mucous membrane is injured, or if the outflow of bile is obstructed, the organisms present multiply and probably a fresh invasion takes place, for bacillus coli almost always predominates.

Attacks of biliary colic, of cholecystitis, or of

biliousness if you like, are always associated with a greater or less amount of septic infection. Evidence obtained from the clinical condition and from the examination of cases surgically treated bears this out. Not only do we find an acute inflammatory condition of the mucous membrane, but in a large majority of cases, ulceration as well. In more severe cases still peritonitis is set up, and adhesions are formed between the peritoneum covering the gall bladder and that covering adjacent surfaces. The pathological cycle, in fact, is not by any means very unlike that of appendicitis.

Naunyn has shown that cholesterin and calcium, the chief constituents of bile, are formed in the mucous membrane of the bile passages. Gilbert and Fournier, too, are of opinion that gall stones derive their origin from this source, and that the mucous abundantly secreted, and the desquamated and degenerated epithelium unite with pigments to form insoluble compounds. So that although gall stones a second stage in the pathogenic cycle may again cause attacks of cholecystitis and biliary colic, these attacks are often present when no gall stones can be found.

It is only when patients experience intense pain that we look upon the case as one of biliary colic, but it is more than probable that many cases of acute dyspepsia, or what are termed attacks of the liver or biliousness are really attacks of cholecystitis possibly, at times, associated with gall stones, or occasioned by an ascending catarrh originating in a gastroduodenal catarrh.

Naunyn who is if anything an advocate of medicinal treatment admits that in the great majority of so-called cures, one has to do with a cure for the time of the septic complications only. Kehr and Mayo hold similar views, and so I am sure must anyone who has given to this subject his thoughtful consideration.

It is true that patients sometimes go on for a considerable length of time after an apparent cure of an attack of cholecystitis, but this is by no means a guarantee that he has been cured. I grant, too, that these cases do not warrant our recommending interference where such a prolonged abeyance of symptoms exists, simply because we are not in a position to say whether gall stones or some such possible sequela of cholecystitis exists.

Although it is admitted that gall stones may form in the bile ducts, the bulk of evidence goes to show that the vast majority are formed in the gall bladder. This is what one would expect, for a running stream such as one finds in the bile ducts would not be so favourable to their development. Again, so far, I know of no case

where a second operation has been needed for the removal of gall stones, and inasmuch as in almost every case either the gall bladder has been stitched well up into the abdominal wound or surplus material removed or the whole bladder or its lining membrane removed, it would seem that this in itself has a marked influence over the prevention of stasis of bile in what is left of the gall bladder, and in a way presumably influences the prevention of the fresh formation of gall stones.

I have not been able to obtain any definite evidence on this point but in cases where there was a probability that stones had formed in the ducts, it would be of some interest to know whether pockets did not exist in which stones could gradually be formed.

Let us look at the pros and cons of surgical versus medical treatment. Gall stones are almost always formed in the gall bladder. The operative treatment in good hands shows one per cent. of deaths. Recurrence must be very rare, I certainly do not know of a single case. If the stones pass into the ducts operative treatment gives us as much as ten per cent. of deaths, though I think that this will probably be greatly lowered. While gall stones remain they may give no trouble, but they are always liable to and frequently do give rise to septic attacks and malignant disease, and more rarely to perforation. All of these prove themselves to be a great menace to life.

I cannot, from my own experience give precise data as to the frequency with which gall stones cause cancer. Within the last two years I have met with six patients under my own observation who died of cancer of the gall bladder following on cholelithiasis. Two of these I thought I had cured with olive oil six or seven years ago. Klob and later Frerichs, Klebs, Hilton Fagge and others have testified to cholelithiasis as a cause. Courvoisier found gall stones in 74 out of 84 cases. Brodowski found gall stones in 40 consecutive cases of cancer of the gall bladder. It is true that cholelithiasis is no newly discovered disease and for that reason there is great difficulty in convincing men that it is not the common place painful but comparatively harmless disease we once thought it. Jaundice, which was so often looked upon as the only feature wanting to clinch the diagnosis is considered by Naunyn to be present to the extent of giving a urinary reaction in only one-half the cases, and this probably means that occasionally cases have had repeated attacks of biliary colic sufficient to give some stones at all events an opportunity of getting into the bile ducts.

Kehr is very emphatic in stating that 80 per

cent. of gall stone cases do not suffer from jaundice. This leaves a large percentage of cases difficult to diagnose, and which were once attributed to bilious attacks, gastritis, dyspepsia, malaria, and other diseases associated with acute abdominal conditions. The grave sequelæ which are apt to supervene are well exemplified in the series I present to you, and I think that the most conservative physician can hardly insist that he is right in allowing a condition of affairs to remain in a patient's abdomen which may at any time produce intra-abdominal, local, or general sepsis.

The state of affairs is this. If a patient has gall stones there is a 1 per cent. of risk open to him if they are removed from his gall bladder, and practically no chance of recurrence. If they are left he must be prepared to take the various risks with which we are acquainted. On the other hand you might remark how often can any of us say positively that gall stones are present? Very rarely indeed, but we do not necessarily operate for gall stones, but for a cholecystitis which is deemed to be sufficiently severe, either from the severity of this one attack or the frequency of the attacks to need operative interference.

Biliary colic is almost always due to cholecystitis. Cholecystitis is a septic condition sometimes amenable to medical treatment. If, notwithstanding treatment, attacks recur, then, whether we think gall stones are present or not, the bile passages should be examined, the cause if possible discovered and rectified. If there be any obstruction to cystic or bile ducts it should be removed. If the gall bladder be affected the lining membrane or the whole bladder should be removed just as we should remove an appendix, for the pathological conditions are very similar.

I shall be brief on the question of the methods of treatment. Preventive treatment should confine itself to keeping in check those causes which are likely to produce gastroduodenal catarrhs.

Olive oil I have used greatly, and at times with good results, that is to say this oil, in conjunction with podophyllin, gave frequent motions, and both the patient and I were delighted to find a lot of green lumps we called gall stones. The fasting and purging relieved the inflammatory conditions, and the attack passed off. The patient called it a cure. I was after a time not quite so sanguine. Cholagogues, with a view to increase the flow of bile, can be of little service. It is not increase in quantity of bile we need, but increase of pressure. If the pressure is increased in the ducts very little

above normal, the secretion of bile is prevented, so that cholagogues can only act as ordinary brisk aperients.

My own impression as to the best method of treatment is this. During the attack give opium and belladonna in order to relieve the pain and spasm. As soon as possible give large doses of salines, preferably, or any other aperient by the mouth, or, if they are not retained, give them by the rectum. Salines produce free watery evacuations and in this way deplete the inflamed part. If the salines be given warm so much the better. The application of heat externally is soothing, and leeching also appears to be of service.

The surgical treatment I have already touched upon. The operative treatment of cases of cholecystitis and cholangitis is at times very simple, but he who attempts to operate on the gall bladder and bile ducts must be prepared for anything, and at times, if he do his duty, he will find that he is face to face with one of the most difficult tasks in surgery.

I have heard of cases of congenital absence of the gall bladder, but I have never met with one. I am inclined to think that greater experience or a more effective search would very much increase their rarity.

Before concluding, I would like to ask—Is it not patent that the majority of us in dealing with cases of cholecystitis and cholangitis have shown too little thoroughness, and have profited too little by our knowledge of the misery and mortality which follows so often in the wake of these cases, and have we not clung too long to the crude and unscientific treatment of our fathers?

After all, what is it we must seek to do for our patients? Is it not to restore them to health as completely, as speedily and with as little risk to life as possible?

If surgery can claim such a large percentage as 99 in early cases, and can, so far as we know, promise complete amelioration, then what object is gained by temporising at times for days and even weeks with a poor wretch who is in constant pain, and who, even if he does recover, recovers with the pleasant prospect that some day he may have it all over again. Even these few cases show what great risks several of the patients ran, and what a small shred of hope the operator often clings to when struggling to bring the case to a successful issue. The dangers of operative treatment have hitherto no doubt deterred many men from recommending their patients to submit to surgical measures, but improved methods and experience in this class of work have made such treatment in

careful hands, infinitely preferable to the many uncertain, tedious, and more painful methods adopted by those whose conservatism or inherited convictions will not allow them to take advantage of the more efficient line of treatment which such cases merit.

A thorough examination into the already active pathological processes in the living subject will not only solve many a clinical riddle, but will give to us the means of saving many a life.

I am afraid that I have told you nothing new to-night, but I shall be content if I have been able to place these few cases before you in such a way as to induce you to look upon this subject with some increase in your appreciative interest.

CHOLECYSTOTOMY, FOLLOWED BY CHOLECYSTO-COLOSTOMY—RECOVERY.

By R. Steer Bowker, M.R.C.S., L.R.C.P.,
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M. R., *et.* 42. Living in Sydney; was admitted to Sydney Hospital on 6th June, 1900. She was a miserable looking woman, appearing many years older than her stated age, having evidently lost a deal of weight, being very jaundiced, almost to a mahogany colour; the conjunctivæ were deeply jaundiced, giving her the appearance of a woman with malignant disease of the liver. Her history was as follows:—She was well up to January, 1900. On February 1st she was suddenly seized by violent pain across the lower part of the abdomen, which lasted for about 12 hours, she vomited freely and felt relieved; the pain was not accompanied by fainting, sweating, or collapse. She went to bed and remained there for three or four days, and still felt weak and ill. She had an irritation of the skin, and shortly became jaundiced; this jaundice has gradually increased in intensity. She has had all along dull aching pains all round the upper part of the abdomen, never acute. No attacks of biliary colic, and she only vomited on the one occasion. She has lost weight; she was about 11 stone in January, now is about 8½ stone. There has been no hæmatemesis or mælena; bowels confined, motions very pale; no pain or frequent micturition, urine is dark. She has no cough, but slight dyspnoea on exertion; feet used to swell.

Past History.—Previous to onset of illness, she was very drowsy for some weeks. There is no history of alcoholism or of the use of strong condiments. She had an attack of inflammation of bowels when 12 years of age.

Family History.—Good.

Present condition.—Temperature irregular, occasional rise to 101° or 102°.

Digestive System.—Tongue dry, furred; no vomiting or nausea; always thirsty; appetite fair; bowels very confined; no mælena, stools clay-coloured; abdomen moderately easy to examine, slightly tender beneath right costal margin. *Liver dulness* from fifth space to costal margin, 4½ in. Stomach resonance lower than normal. Flanks resonant, spleen not enlarged. *Circulatory, respiratory,* and other systems are normal. She was tender on deep pressure, and the muscles stood on guard, and it was impossible to feel the gall bladder, so we concluded it was not very distended; this pointed to gall stones as the cause of the obstruction, and Dr. Jamieson was of opinion that the trouble was due to a stone impacted in the common duct, though the sudden onset, without any attacks of biliary colic and the steadily increasing jaundice not being intermittent, was rather against cholelithiasis. However, we agreed as to the mode of treatment, and decided to cut down and explore, the patient herself being very anxious for the operation. She was put on calcic chloride gr. xxx, t.d.s.

13th June.—She was given a hypodermic injection of morphia and atropine, and ether was the anæsthetic used. I could now distinctly feel a linguiform prolongation of the liver, with a distended gall bladder. An incision was therefore made over the tumour, and a very distended gall bladder found, the walls of which were very thin in places and thick in others; a hard greyish nodule was found on the surface of the liver, and on the under surface were also seen several lines of fine yellowish nodules running in the direction of the lymphatics; all round about the common duct was matted, and the duct hard to palpate, but no stone could be felt. What was at first thought to be a stone was found to be an enlarged gland in the curve between the cystic duct and the gall bladder. I removed a small nodule from the liver for microscopic examination. There was such a lot of matting that I could not make out the parts near the duodenal opening of the duct; the gall bladder was then packed round and an exploring syringe introduced into its lower end, and a quantity of pus withdrawn. The bladder was freely opened and explored, but no stone could be found; it was then stitched in the usual way to the wound.

14th June.—Microscopic examination showed the growth removed to consist of young fibrous tissue only. I was glad of this, as I was afraid, by the appearance of these nodules, that the cause of the obstruction was malignant.

10th July.—Patient recovered well from the operation; jaundice gradually disappeared, and she gained in flesh, health, and strength; but the discharge of bile from the fistula was of course very great, as the obstruction still remained there.

2nd October.—Patient is a different woman. She eats well, looks well, feels well, has gained considerably in flesh, but complains of the fistula, which discharges an enormous quantity of bile each day, as being an intolerable nuisance to her, and begs to be freed from it; so I explained to her the risk of a cholecyst-enterostomy, as I considered that the only operation which could give her relief, and she determined to undergo it, to get rid of her infirmity, so, after consultation, I decided to try it.

17th October, 1900.—Hypodermic injection of atropine and morphine was given, and, under ether, an incision was made surrounding the old scar with an ellipse, the sinus was plugged with wool, and dissected from amongst the tissues, until its junction with the gall bladder was reached and freed from the abdominal wall; this was clamped to prevent the escape of bile during further manipulation. The gall bladder was very atrophied, in fact was little more than a tube, and was firmly fixed in a mass of omentum, and a great many adhesions had to be broken down, and another search for gall stones instituted, but none could be found, a probe passed as far as possible through the bladder, etc. The parts about the common duct and head of the pancreas were very matted, and it was impossible to thoroughly palpate the common duct, a condition which was present at the former operation. At this time I did not know of Weller van Hook's method of air distention, or should have tried that. The obstruction (now that we knew that the growths on the liver were inflammatory) being probably due to interstitial pancreatitis, the only thing left was to join the bladder to the intestine. The adhesions about the duodenum were so great and so dense, and the ascending colon so ready to hand, that I determined to join the gall bladder to that viscus, lying as it did almost in contact with its lower surface, so that I closed the opening in the lower end of the bladder with catgut, made a fresh opening in its lower surface, and joined it by means of a small Murphy's button, to the ascending colon just below the hepatic flexure; the abdominal wound was then closed with through and through sutures of silkworm gut, and dressed in the usual way.

18th October.—Temperature 98.4°, pulse 74, no distention, slept well, is very sleepy.

26th October.—Doing well, but has considerable diarrhoea.

1st November.—Diarrhoea has stopped.

27th November.—Went to the Walker Convalescent Hospital to-day; wound quite healed and firm. Is very well and very grateful, but has not returned the button.

I saw the patient recently, and she was then very well indeed, her only trouble being a small hernia at the lower part of the wound, and she had become so enamoured of operations that she wished to have this at once attended to.

I advised her to leave it for a little, though the temptation to have a look at the seat of anastomosis was considerable.

Remarks.—Now with regard to the diagnosis in this case. Here we had a case of extreme jaundice, coming on with very marked acute pain in the epigastric region, and lasting for 12 hours; no attacks before or after of biliary colic; the jaundice intense and increasing, and not intermittent, and by ordinary examination no gall bladder to be felt; tenderness under right costal margin, and the right rectus on guard, with a deep, dull, aching pain near the navel, almost constant. By the jaundice there was evidently some obstruction to the common duct; by the fact that this jaundice was constant, the obstruction was evidently fixed, that is not movable; by the fact that there was no colic, evidently the gall bladder gave up the fight of trying to overcome the obstruction, and considered it futile, that is its muscular walls ceased to painfully contract, and distention instead of contraction took place. Now all this happened suddenly to an otherwise healthy woman. She was five months in this condition without gaining ground, but on the other hand was losing weight, and becoming more jaundiced, and had an erratic temperature, and always a deep-seated, dull, aching pain in the epigastrium, and no tumour to be felt.

The proper treatment, no doubt, would have been to have examined her under an anæsthetic, for in all these cases it is important to know the condition of the gall bladder, and, mostly without the aid of sleep, impossible to get this information, and in the diagnosis a deal depends on this, for there are certain aphorisms laid down for our guidance, and generally pretty correct:—

I. A distended gall bladder without jaundice points to obstruction in the cystic duct.

- II. *A distended gall bladder with jaundice points to fixed obstruction (tumour) in common duct, stricture, etc.*
- III. *A contracted gall bladder with jaundice to movable (not constant) obstruction such as a stone, in common duct, owing to its ball valve action. (Fenger, Robson, and others.)*

The gall bladder in this latter case tries to dislodge the obstruction which is not constant, and its muscular walls become hypertrophied, and there are constantly recurring attacks of biliary colic, ceasing when the stone falls back in the dilated duct, with intermittent attacks of jaundice, more or less, as the stone allows the bile to pass, and the bladder eventually becomes thickened and contracted. On the other hand, if the obstruction is fixed, as by a fixed stone, or an increasing tumour, or inflammatory product, or a stricture, the result of an ulceration with contraction, then the gall bladder, finding it useless to fight against the obstruction, distends, and is, as it were, thrown out of commission; and, if poisoned, fills with pus, or, if not, with bile, which becomes decolourised, and with mucus from the mucous lining of the walls.

Now, had this woman been examined under an anæsthetic, we should have known (as we did later) that she had a distended gall bladder, with constant and increasing jaundice, and this would, in itself, have rather pointed to the fact that the obstruction was constant, and so probably not caused by a stone, and as stones are generally formed first in the gall bladder (on account of the conditions necessary for their formation being existent in the gall bladder more so than in any other part of the bile tract), there would have been painful attacks before the last sudden one in the passage of the stone along the cystic duct; but we get no history of there having been any, and at the operation no stone could be found.

Hence it looks as though the cause of the obstruction was an adhesion or pressure of some sort, malignant or inflammatory. The attack came on too suddenly for malignant disease, so that it probably was inflammatory. Probably the cause was interstitial pancreatitis, with cholangitis and empyæma. A cholangitis alone or desquamative angio-cholitis would hardly account for such fixed obstruction, lasting after the gall bladder and ducts had been thoroughly drained for four months.

Now this and other cases which I have had have made me think a good deal about jaundice and gall stones, and teach that one can have a good deal of jaundice without any gall stones,

and also that one can have a good many gall stones without any jaundice. One in his earlier days used to think of jaundice and gall stones as always running in couples, but this is far from being the case.

The fact is that when gall stones cause jaundice the case is pretty serious, and requires very often a very serious operation indeed to give relief, for I do not know of any more formidable operation than a choledochotomy, with all the parts out of relation and matted together by inflammation, as the result of a stone or stones which will not pass into the duodenum, even though the patient has taken all the oil which has been ordered to him by his different physicians.

Some people have luck—some people always will have—but ordinary mortals cannot depend on that; the stones, if left, have a fashion of jumping the fence, or rather of not making themselves scarce by the orthodox exit, even when supplied by oil. I remember being asked to see in consultation, with a view to operation, a lady who had suffered from gall stones for many years. She had very violent pain, and evidently some peritonitis; she had passed a few small stones, so that we decided not to operate immediately, but to wait a little; in the meantime she vomited some large stones, one very large one and a lot of others had passed by the rectum. They had probably slowly ulcerated into the stomach and become voided, but she was lucky; they might just as easily have ulcerated through into the abdominal cavity and set up a fatal peritonitis.

Now this patient had lived for years on the brink of a precipice, suffered constantly recurring attacks, in the constant danger of death, or what was much worse—the danger of cancer. She had the good luck to come out all right, but how many can depend on that, and if in the end an operation had been necessary it would have been a most difficult and dangerous one.

I have operated upon a great many cases of gall stones, and I can say that the only case that was not cured was one of very long standing—20 years—then on his last legs from pain, cholemia, and exhaustion, with stones impacted in his common duct; I removed seven as the result of a long, tedious, and difficult operation, but he died in a short time from the shock, added to his already cholemic condition. This was the only case I ever lost, showing what a safe operation the operation on the gall bladder is; and I don't think anyone should leave a painful and distended gall bladder in the hopes that it may get well—for that is what it comes to—and watch a stone, which is literally in his

grasp, while for weeks, or months, or years it is *trying* to get into the most inaccessible place which it can get—the common duct—there, to set up the tortures of the damned, to say nothing of the terrible risks he lets his patient run. Remember the number of cases quoted where a distended gall bladder has been ruptured by a slight tap, and set up a fatal peritonitis; of cases where ulceration has taken place, and death followed while the stone has been waiting for the surgeon to remove it, to say nothing of malignant disease which is so often set up. Are we to wait until all this happens, when an early operation, which is simple and safe, could be done, and all the danger and suffering obviated?

A great deal depends upon the physician and general practitioner who see these cases early, and who, if not certain that he can feel the gall bladder, should place the patient under an anæsthetic and make sure and, if it is enlarged and painful, should have it operated upon without loss of time, and not wait and watch and give oil, while the patient either dies or becomes a morpho-maniac, with the risk of dying at any time.

Most general practitioners now recognise the fact that a person who has had two attacks of appendicitis—why two I don't know, but that is somewhat towards the right path—should be operated upon. Why not give the other poor wretches who have had two attacks of gall stone colic or cholecystitis the same chance of relief and safety. If one had a patient with stone in the bladder would one give him oil to lubricate his passages, and wait until he passed the stone per urethram? I think the most conservative would hardly do that, and I see but very little difference; or would one wait for a stone to work its pleasant and invigorating passage from the kidney to the bladder before interfering with it? It *may* pass some day of course.

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A CASE OF DIAPHRAGMATIC HERNIA— OPERATION—DEATH.

By C. P. B. Clubbe, M.R.C.S., L.R.C.P. Lecturer in Clinical Surgery and Hon. Surgeon Prince Alfred Hospital, Sydney;

And

Sinclair Gillies, M.D. (Lond.) Hon. Assist. Physician Prince Alfred Hospital.

M.G., *æt.* 70, a hale-looking old man, walked into Prince Alfred Hospital on 28th September, 1901, complaining that his bowels had not acted for a week. He was living in a tent at Marrickville, and had just come into an old-age pension. As he had been vomiting he was admitted for observation.

He gave the following history:—Has always been a healthy man, but always subject to constipation. Twenty years ago he fell from a height, fracturing three ribs on the left side and injuring his head. He was very ill at that time, but completely recovered. His occupation until recently had been that of a gardener. Four days before admission, while lying in bed sewing, he was seized with sudden pain in the left side of the abdomen. The pain was very severe, and kept him awake all night. It has persisted till admission. Vomiting commenced on the same evening, and has continued. Two days before the pain came on he noticed that his stomach was swelling. He has had a cough for two months past. He gave no history of sudden onset of dyspnoea.

His bowels had not acted for a week before admission, but he could not say whether he had passed flatus or not. No history of further illness or injury was obtainable.

On the afternoon of admission he vomited feculent material. He was given calomel gr. v., and an enema by the house physician, which resulted in a motion accompanied by flatus. Later in the evening his bowels acted spontaneously, but vomiting continued. Next morning he had two more enemata, followed by passage of flatus, but no motion. Fæcal vomiting continued.

When seen by us for the first time on the afternoon of the 29th September his condition was noted as follows:—Patient is a well developed, muscular old man. He lies in bed in evident pain. His face is bronzed and shows no signs of anxiety. His tongue is coated with thick dirty fur, his breath is very offensive. His *chest* is barrel-shaped, and on inspection the right side is seen to move better than the left. Vocal vibrations are diminished on the left side. The percussion note is hyper-resonant over the left front of

the chest, especially below the nipple. The cardiac dullness is absent, but on the right side there is a dull area bounded above by the fourth rib, to the right by a line just internal to the nipple, to the left by a line one inch to the right of the sternum. There is some indistinct impulse over the dull area, but no distinct apex beat is made out. The heart sounds are best heard over this dull area, the maximum being along its inner edge. Below the level of the nipple on the left side of the front of the chest a markedly tympanic percussion note is present, and this is continued uninterruptedly on to the much distended abdomen.

Breath sounds are vesicular on the right side. On the left they are very faint at the apex, and absent below the second rib. From the second rib downwards there is well-marked metallic tinkling, which is of a more gurgling character than that usually heard in pneumothorax. It is heard better in some parts of the left side of the chest than in others, notably below and outside the left nipple. It can be traced uninterruptedly on to the distended epigastrium, where it assumes a deeper pitch. Bruit d'airain is heard all over the left side below the level of the third rib and over the epigastrium. Behind, the percussion note and breath sounds are normal over the right side. On the left the note is hyper-resonant, and the side moves less than the right. Breath sounds are very weak over the left back. At the base metallic tinkling is occasionally heard, and bruit d'airain is present.

Succussion splash is made out at the base behind.

Respirations are twenty per minute, and only slightly embarrassed.

Heart.—Dullness is present on the right side of the chest as described above. Sounds are weak and irregular. *Pulse* is 80, feeble, very irregular in force and rhythm.

The abdomen is much and irregularly distended, the epigastrium and both iliac regions presenting prominences due apparently to distended bowel.

The tympanic chest note, bruit d'airain, and metallic tinkling can be traced uninterruptedly from the left side of the chest on to the epigastric bulging. The percussion note is tympanic all over the abdomen. The upper part of the abdomen moves well on respiration, the lower part very slightly. Liver dullness is one inch and a half in the right nipple line. Inguinal and femoral rings are normal. A peritoneal rub is palpable over the epigastrium.

The extremities are normal.

Urine, specific gravity 1020, slight haze of albumen.

Temperature, 99°.

The left side of the thorax was tapped by a fine needle and air withdrawn, which was odourless.

The patient obviously had intestinal obstruction, and in addition the physical signs of a pneumothorax of an abnormal nature. This abnormality consisted in the fact that metallic tinkling could be traced continuously from the thorax on to the upper part of the abdomen, increasing in loudness as the abdomen was approached, and that it was heard with considerably varying intensity on areas close to one another on the chest wall. The same variation was noted in the bruit d'airain.

The most probable explanation seemed that these sounds, both in the chest and abdomen, were produced in widely dilated bowel, the variations in intensity being determined by the limits of the distended viscera. A diagnosis of diaphragmatic hernia with strangulation was therefore made, and it was decided to attempt its relief though the patient's condition was very bad.

The patient having been anaesthetised, Mr. Clubbe made an incision from the ensiform cartilage to the umbilicus. Hugely dilated small intestine presented. On inserting his hand he found that he could pass it up through a fissure in the left side of the diaphragm into the thoracic cavity where a much dilated stomach and intestines were found firmly fixed.

Following the advice of Trauman (the patient being in too collapsed a condition to allow of ribs being excised, and a hand introduced into the pleural cavity) the left side of the chest was tapped by a large trocar, and an attempt made to draw the viscera into the abdomen. This was found impossible and the trocar was withdrawn. A second attempt at reduction was made, and the trocar was again inserted through the same wound. This time it pierced the stomach wall and the stomach contents drained through the tube. Further attempt at reduction being deemed useless the wound was closed, the trocar left in situ, and the patient sent back to bed. He died fourteen hours later.

Post-mortem.—On opening the thorax, the greater part of left side of the chest was occupied by a much dilated stomach, the left lung being pressed upwards and inwards, where it was firmly fixed by adhesions to the pleura around and to the stomach below. The lower and half the upper lobe were much compressed, only the apex of the upper lobe appearing to be functional.

The heart and pericardium were displaced to the right, so that only one-third of the left ventricle lay to the left of the sternum. The right lung was everywhere adherent to the pleura by fine adhesions.

On opening the abdomen masses of widely dilated small intestine presented. There was no peritonitis present.

We have here the contents of the thorax and abdomen, with the diaphragm, ribs, and vertebræ complete. Sufficient dissection has been carried out to shew the relations of the various organs. This has involved breaking down the dense adhesions which bound the organs to one another and to the pleura.

In the left side of the diaphragm is a large oval opening about four inches in longest diameter. It begins close to the vertebral attachment and its anterior edge, which is sharp and thick, curves outwards to the ninth rib, where it turns backwards towards the vertebræ. At the ninth rib only about half an inch of diaphragm intervenes between the opening and the ribs. Through this opening the hand can be passed, and no sign of constriction exists here. Through it and through the pleura covering the diaphragm has passed the stomach, which was much dilated, and occupied the whole of the front of the chest as high as the third rib. It had pressed the left lung upwards and inwards against the mediastinum, which, with the heart, was displaced to the right. The stomach was densely adherent to the parietal pleura and to the outer and under surface of the lung. Part of the pleura is left to shew the denseness of the adhesions.

Extending up behind the stomach lay twelve to eighteen inches of collapsed transverse colon, which could be traced through the opening to the collapsed colon in the abdomen.

Behind the colon and well above the diaphragm lay the spleen, packed tightly by dense adhesions against the pleura covering the upper part of the ninth and tenth ribs. So closely adherent was it to the pleura that it was discovered only late in the dissection. Along its hilum it was adherent to the posterior edge of the diaphragmatic opening and from its lower end an adhesion passed to the outer edge of the opening.

Between this adhesion the attached hilum and the edge of the diaphragm between them, a knuckle of small intestine had passed and become strangulated. It lay in a small pouch bounded by the diaphragm below, and the parietal pleura externally, and the spleen above, from which it

was separated by a piece of omentum. The entering portion of the gut can be traced through the diaphragmatic opening as a distended coil continuous with the dilated small intestine, duodenum, and stomach. The distal portion is continuous with the collapsed small intestine and colon seen in the abdominal cavity. Death was, therefore, due to strangulation of a knuckle of small intestine by a band within the thorax, and not directly to the hernia itself.

About an inch of dilated duodenum beyond the pylorus was found in the thorax. Behind the collapsed colon, and between the stomach and posterior edge of the spleen, three inches of pancreatic tail lay vertically.

The left kidney lay just below, but did not pass through the opening.

The relationship of the viscera in the opening was as follows:—Internally was the duodenum, externally and in front the dilated and contracted portions of small intestine, passing in front of the contracted large intestine behind and internal to which lay the pancreas.

No trace of old fracture was detected in the ribs.

Remarks.—The case is remarkable in several respects. The hernia was evidently of long standing, and must have existed for years without causing symptoms. It may have dated from the injury twenty years before, but no sign of old fracture could be detected in the ribs.

Though 72 years of age, the man was active, and had till recently worked for his living. Close questioning failed to elicit any cause for onset, except perhaps, the accident mentioned above.

Death was due, not to the hernia, but to strangulation by a band within it. Operation might have relieved the strangulation had its seat been discovered, but no operation could have reduced the hernia owing to the number and denseness of the adhesions between the viscera and the parietal layer of pleura.

The risk of tapping the pleural cavity to equalise pressure in such cases is well shewn by the results of tapping of the stomach in this case. Doubtless the right procedure in such cases is to resect several ribs and attempt reduction through the thorax.

No pleural covering existed over the hernia between it and the lung. It therefore belongs to the class of false herniæ, which, according to Leichtenstein, are ten times more common than the true. According to the same authority, out of 250 cases collected by him the condition was diagnosed on five occasions only.

We think the case worthy of record as the literature on the subject is scanty and the number of cases few in which a diagnosis has been made during life and an operation attempted for its relief.

AN ARTIFICIAL LARYNX.

By G. T. Hankins, M.R.C.S., Surgeon to the Nose, Ear and Throat Department, Prince Alfred Hospital, Sydney.

THIS apparatus is for use in those cases of total extirpation of the larynx where all sinuses between the oral cavity and the external air are closed, and all direct communication between the lungs and upper air-passages cut off. It consists, essentially, of a small three-necked Wolff's bottle. Through a perforated cork in the middle neck passes a tube bearing the reed which hangs downwards in the centre of the bottle, the outer end of the tube being connected with a No. 14 (English) soft rubber catheter cut off obliquely at the end.

To one of the necks of the bottle is fitted a stiffish rubber tube four inches long and quarter-inch internal diameter, ending in a vulcanite nipple for plugging into the tracheal tube. The third neck of the bottle is left open.

The reed is one taken from a penny toy known as a "screecher." It is of the "beating" variety, on the same principal as the clarinet reed, and made of metal. Unlike the "free" reed of the harmonium, or mouth organ, it is of very strong tone, and cannot be over-blown. The long narrow tube of the catheter to which it is attached merely lowers the pitch without stopping the vibrations, as would be the case with the harmonium reed. The tongue of the "screecher" reed requires a little manipulation before a satisfactory effect can be obtained, but when obtained the result is permanent.

In using this apparatus the patient smears the catheter with vaseline, and passes it along the nose for six inches, where it is fixed in position by a vulcanite olive through which the catheter passes, and which is plugged into the orifice of the nostril.

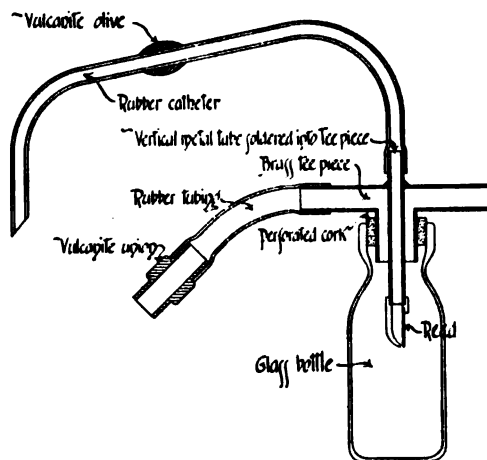
The patient next inserts the nipple at the end of the short tube into the trachea opening on to the skin of the neck. He can then breathe easily and without noise so long as the third neck of the bottle is open.

When he wishes to speak this opening is closed by the forefinger of the hand holding the bottle, and on expiration the air is forced

through the reed and enters the pharynx in a state of vibration just below the uvula, producing a bass note in fair imitation of the male voice.

The patient for whom the apparatus was made, can now articulate, not very clearly in this case on account of one-sided paralysis of the tongue, but he can recite the only piece he knows, i.e., the Lord's Prayer, and make himself well understood. I know the idea of getting access to the pharynx through the nose is not original, it having been carried out by Glück and mentioned in the *Berliner Klinischer Wochenschrift* for March, 1900. I have not been able to obtain access to the article, but I understand the reed was contained in the olive which fitted the nostril. By this plan an ordinary "free" reed could be used, as the column of air to be set in vibration would be only six inches long, but the tone of such a reed is very unnatural and doll-like.

By placing the reed in a bottle it is kept perfectly free from contact with secretions and condensed moisture, and the whole apparatus can be easily taken to pieces and kept clean.



In the instrument shewn in the illustration, instead of a three-necked Wolff's bottle an ordinary wide-mouthed bottle is used, the three apertures being furnished by the use of a brass tee-piece, thus diminishing the bulk and increasing the strength of the apparatus.

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NOTES ON PARTIAL HEPATECTOMY, WITH THE REPORT OF A SUCCESSFUL CASE.

By **W. J. Stewart McKay, M.B., M.Ch., B.Sc. Syd.**
Senior Surgeon, Lewisham Hospital for Women, Sydney.

THE patient, a female, aged 36, suffering from phthisis, consulted me four years ago on account of a swelling in the epigastric region. I considered it to be a hydatid of the liver, and advised an operation.

The patient returned to me three months later and said that she had been operated on at the Sydney Hospital for "floating kidney," but on examining her I again found a tumour, and advised an operation. The woman readily consented, because she was in great pain; so great, in fact, that I expected to find that an abscess had formed. On percussion, I discovered that the tumour was situated to the left of the median line, in the epigastric region, and that its lower border was well defined and reached to the umbilicus; but there was a distinct tympanitic zone between the liver and the tumour, which made me think that I was about to deal with a growth in the transverse colon.

The patient was operated on at the Lewisham Hospital. An incision was made in the median line, beginning 2 in. above the umbilicus and extending down to the lower border of the mass. On coming down to the peritoneum it was seen that the great pain that she had suffered was due to a very extensive local peritonitis. After separating the adhesions, which bled very freely, the tumour was found to be about the size of two fists, and to be part of the left lobe of the liver; there was, however, no pedicle. The tumour was delivered through the abdominal incision, and I proceeded to pass silk ligatures through the liver well beyond the growth, which could be distinguished by its firmer consistence. When, however, I began to tighten up these ligatures they cut through the liver substance so easily that it was evident that they would not control the hemorrhage if I attempted to remove the growth. I accordingly transfixed the liver with some hat pins, and then passed the ends of the silk ligatures through the abdominal wall and tied them, and by these means I was able to firmly anchor the tumour, which was dusted with tannic acid and boracic acid and covered with gauze.

The patient suffered great pain from the dislocation of the liver, but otherwise she exhibited no alarming symptoms. On the third day after the operation I took a large amputating knife

and removed half the tumour; there was considerable oozing, which I checked with the cautery; the cutting of the liver gave the patient no pain whatever. Each day after this a slice was removed, and by the seventh day after the operation I had reached almost to the pins.

As the liver appeared to be firmly adherent to the abdominal walls, I removed the silk ligatures, as one of them had become infected by the stump and had caused a stitch abscess. The stump was kept as sweet as possible by washing it with peroxide of hydrogen. The patient returned home after six weeks, and I have seen her from time to time during the last three years and nine months.

Two years after the operation her legs and abdomen swelled very much, and she was forced to take to her bed; but after some months the dropsy and the ascites disappeared, and she has now no sign of any swelling in the legs.

The growth was examined by Dr. Camac Wilkinson, who pronounced it to be a sarcoma. I believe that the growth has returned, for the liver is now very enlarged and the patient much wasted. Other cases have been recorded where the patient lived for some time after the removal of a malignant neoplasm of the liver: Hochenegg's and Lücke's cases were alive after three years, while Schrader's case was well seven years after the operation.

One point may be noted about this case, i.e., that she was first operated upon under the impression that the tumour was a floating kidney; while, when I came to deal with the case I thought that the growth was in the transverse colon.

These mistakes have been made by others in dealing with solid tumours of the liver. Thus, Eiselberg thought that he was about to operate on an omental tumour, but it turned out to be an angioma of the liver; Israel diagnosed a renal tumour, and found a vascular sarcoma of the liver; Keen diagnosed a floating kidney, and found an adenoma of the liver. These mistakes occur because a very marked tympanitic area occurs between the tumour and the liver, and Terrier and Auvray record six cases illustrating this point.

I have not recorded this case because I am in favour of this method of treating neoplasms of the liver, for we must always regard the extra-peritoneal method of treating a pedicle, whether of the uterus, the liver, or any other organ, as an indication that we have adopted a safe, but a primitive and imperfect method.

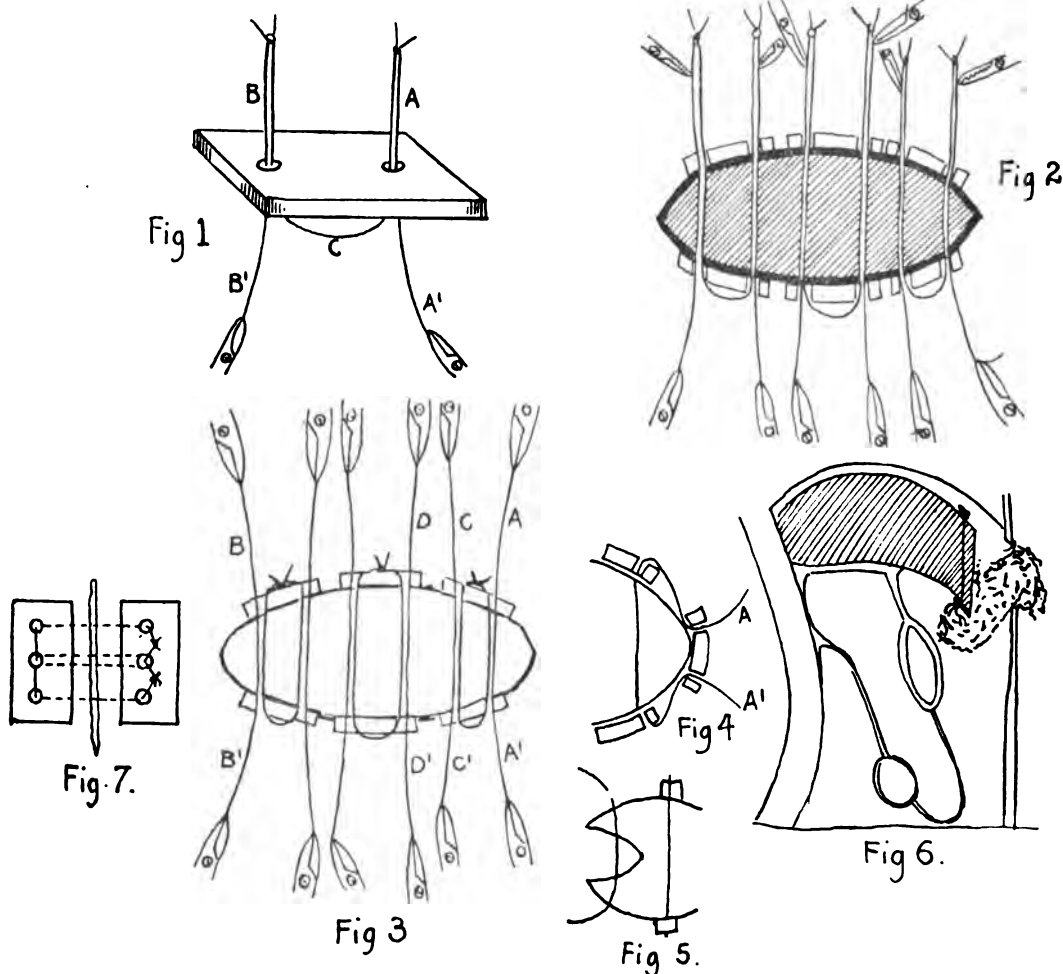
Turning, now, to the reports of cases of partial hepatectomy, it appears that the operation

has been performed some 55 times, while about 20 other cases may be added if we included instances where, in dealing with hydatid cysts, amputation of portion of the liver-substance has been made. I have grouped these cases into four divisions:—

1. In the first group the tumour is brought out through the abdominal incision, fixed externally by pins, and constricted by the elastic ligature, and after a period the tumour is removed by amputation or by the cautery.

hæmorrhage by a temporary elastic ligature, then fixing the stump by attaching it to the edges of the abdominal wound. Hochenegg and Rosenthal operated in this way. Lius reports a case operated on by Escher in which, after removing the tumour, he fixed the pedicle to the abdominal wound. The stitches, however, tore away, and the pedicle was allowed to drop into the abdominal cavity: the patient bled to death.

3. In the third group are placed those cases



Lauenstein, Lüke, Terrillon, Tillmans, and Mayo Robson have reported cases operated on by this method. Küster adopted this plan in one case, but the patient died from septicæmia.

2. In the second group we have the cases in which the tumour is removed at the time of the operation, the surgeon controlling the

where the tumour has been removed by slowly cutting through the liver substance with the cautery; enucleating the tumour with the finger-nail or a curette; or by taking a wedge-shaped piece out, and controlling the hæmorrhage by ligaturing the large vessels and packing in gauze to control the oozing. These methods have been frequently adopted, and cases have

been reported by Eiselberg, Bergmann, Israel, Mikulicz, Heidenhain, Keen, and Elliot.

4. In the fourth group are placed these cases where the ideal operation has been performed. In these cases the tumour has generally been pediculated, and the pedicle has been sufficiently fibrous to enable the surgeon to tie off the pedicle and then close the abdominal wound. Christopher Martin removed an accessory lobe of the liver in this way. Langenbuch tried this procedure, but the abdomen had to be re-opened for secondary hæmorrhage from the pedicle. Wagner lost a case from hæmorrhage; but Keen, Vohtz, and Bruns have recorded successful cases.

The reason why partial hepatectomy is a comparatively uncommon operation, is because the parenchyma of the liver is of such a nature that ligatures introduced to control hæmorrhage cut through the liver-substance with great ease. Again, we cannot control the hæmorrhage by ligaturing the hepatic artery, for the liver differs from all other organs in the body, inasmuch as the blood entering it is chiefly venous; and in cutting the liver the hæmorrhage comes with a rush from the portal veins and oozes from the hepatic veins. But there is a great difference between the two, for the former have a sufficient amount of fibrous tissue surrounding them—derived from Glisson's capsule—to enable us to ligature them; while the hepatic veins are very thin-walled vessels, the hæmorrhage from which is controlled by gauze pressure or by the cautery.

From the above considerations it follows that any mass ligature that is introduced into the liver-substance will fail to control hæmorrhage, if that ligature is inserted in such a way that, as it is drawn tighter, it tends to form a circle. There can be no effectual hepatic ligature, unless the sides of the ligature remain parallel when drawn upon.

Terrier and Auvray advocate a ligature which, when introduced, divides the pedicle up into square compartments, and cannot cut through the upper surface of the liver because of an interlocking ligature which joins each loop as it emerges from the liver. But this method of ligature fails because there is nothing to prevent the strands cutting through the lower surface of the liver. In fact, these authors point out that each knot should be tied so tightly that the liver-substance is cut through; the large vessels, however, are not cut through, but are only compressed. The result is, that there is considerable oozing from the hepatic veins.

I wish, now, to suggest a method which I have

tried on pieces of liver with success, and which, I think, will overcome many of the difficulties of hepatectomy, and will enable us to extend the scope of the operation, particularly in cases of malignant disease of the gall-bladder, where a small area of the liver has become affected. The idea, no doubt, has occurred to others, but I am not aware that it has been tried on human beings. I propose that, previous to the operation, several discs of decalcified bone—say, lin. in length and $\frac{1}{2}$ in. in breadth—in which two holes have been drilled, should be threaded with three pieces of catgut (fig. 1). The central loop of gut (c) should be of a different colour to the side pieces (a and b), and this is easily managed by preparing the gut with the pink soloids of biniodide of mercury (Burroughs, Wellcome & Co.'s). The lower single free ends (a^1 , b^1) of the gut may be caught by catch-forceps. After endeavouring to define the limits of the tumour, it is walled off by gauze sponges, and a blunt pedicle needle is pushed slowly from above downwards through the liver-substance until it emerges below, when it is threaded with one of the loops (a) attached to the bone-plate, and the needle is withdrawn, carrying with it the loop to the upper surface of the liver, where it is passed through a plate and caught by a pair of catch forceps. The uncoloured outer strand only should be seized (fig. 2), so that when all the loops have been drawn up and we are about to tie off, we may sever the strands of the coloured loop and thus leave the forceps attached to the uncoloured strands, and so avoid confusion (fig. 3).

The reason for tying the central coloured loops first is obvious, for we then have a series of fixed points, and we can now proceed to tie the lower strands (fig. 3, c^1 , d^1) of the uncoloured gut, and then the upper portions of the same strands (fig. 3, c and d). The end strands (a and b) are left until the last, when they are tied so as to encompass the extremities of the base—a being tied to a^1 . As, however, the liver may be cut through if much force is used, it will be well to bring both these strands through a small curved plate and then to tie them (fig. 4).

It is well to bear in mind that a sharp needle, or a three-faced needle, should not be employed; for if the needle be sharp the large hepatic veins will be pierced and the blood will pour out of the needle-track. It is quite possible, after a little practice, in passing a blunt needle through a liver, to feel the resistance to its progress when we encounter a large portal vein. owing to the fibrous coat derived from Glisson's capsule. The needles

that I propose to use on the first opportunity are blunt Reverdin's needles, curved right and left.

The tumour may now be removed, either by amputation or by slowly burning through the liver substance. The cautery should be heated only to a dull red, so as to char the tissues, and should be drawn across the liver tissue repeatedly, but little being burnt at a time. If the tumour be large, it will take at least half-an-hour to remove it in this way. I think, therefore, that it would be well to begin by making an incision into the liver on the distal side of the ligatures, and if we find that the hæmostasis is complete, to at once proceed to amputate, after which the large vessels may be seized and ligatured, and then, if necessary, the surface may be cauterised.

It must be borne in mind that the cautery is powerless to arrest hæmorrhage from a large portal vessel, and these should always be tied; the hepatic veins may ooze, but gauze pressure or the cautery will control this.

If possible, on excising the tumour, we should make a V-shaped incision, so that we may bring the surfaces together at the conclusion of the operation by a few mattress or single sutures (fig. 5).

If the surface left, after removing the tumour, is a broad one, then we should isolate the liver, by placing a sheet of iodoform gauze beneath the liver (fig. 6), and bring it into contact with the charred surface, because for days after, a free flow of bile usually takes place; the gauze may be renewed, or it may be allowed to remain in its original position. If, however, the compression has been sufficient to stop all hæmorrhage in the first instance, it is unlikely that the bile will escape in any quantity.

I can see no objection to leaving these decalcified sterile plates in the peritoneal cavity. They will certainly do no harm, and they will not be so irritating as the three or four square inches of charred liver surface usually left behind.

Should, however, there be any objection to them, we may remove them at the conclusion of the operation; but if we do so, we must be very sure that the large vessels have been secured, and that the whole surface has been well charred.

On the other hand, they may be allowed to remain for a week and may then be removed, if we have taken the precaution to fix a strand of chromic gut in a third hole in the plate; the strand may be then brought out with the gauze at the conclusion of the operation.

These plates may be used for operating in cases of ruptured liver (fig. 7). They may

also be used in operating on cases of hydatid cysts situated an inch below the surface of the liver, when, in order to reach the cyst, we are compelled to cut through the parenchyma of the liver, and the wound becomes flooded with blood.

HEREDITY AND DISEASE.

By J. Flynn, M.B., Ch.M., R.U.I., Sydney.

(Continued from page 440, "Australasian Medical Gazette," October 21, 1901.)

THE theory then that consanguinity has a specific effect in the deterioration of the offspring, by reason of the "non-renewal of the blood" rests on slender foundation. In-breeding of animals implies a closeness of mating²⁵ that is out of the question in the human subject, and yet with proper precautions no deleterious consequences are observed in the offspring. If then such consequences follow in the marriage of relatives, they must be due to some other cause than the consanguinity. In comparing the marriages of near-of-kin and the in-breeding of animals, we must remember that while both classes have this in common—union of kindred—they have also this important difference, namely, that a careful artificial selection is practised in the one, which is conspicuous by its absence in the other. In other words we have consanguinity, pure and simple, free from any complication in the one; in the other we frequently have consanguinity intensifying and accentuating a common morbid heredity.

The practical breeder knows full well that the greatest objection to in-breeding, in fact, the only one of importance, is the difficulty of selecting animals free from constitutional defects, and the loss to him from the tendency of such defects to become dominant in the offspring. The untoward results arising from marriages of near of kin are almost invariably to be ascribed to similar constitutional defects inherited by the wedded descendants from some long-forgotten ancestor. When we reflect that cousins are descended from a common ancestry, and so possess a common heritage—of

(25) In-bred animals are generally produced by breeding in the direct line between a sire and his daughter or granddaughter, or between a dam and her son or grandson, though close breeding in the collateral line is also practised.

In a recent contribution to the Edinburgh Royal Society Professor Ewart, from experiment conducted on the in-breeding (a) of pigeons, (b) of rabbits, (c) of horses, concludes that consanguineous breeding was not accompanied by a diminution in size or a loss of fertility, but that in the case of horses it reduced the various tissues, increased the sensitiveness and led to irritability and loss of constitutional vigour, but why it did so he could not say. He also points out that while the offspring of second cousins might be small and deficient in vigour, the offspring of first cousins or of members of the same litter might be large, well-formed and unusually vigorous.

The influence of consanguinity on the offspring (continued)

strength or weakness of constitution, of immunity or susceptibility to disease—it is easy to understand how their issue run a double chance of inheriting those qualities they possess in common, be they good or bad. If then, parents, though related, are heirs to a sound constitution, with no defects to transmit, their offspring have, as it were, a double guarantee against constitutional flaws; but if, on the other hand, cousins join in marriage possessing in common a depraved heritage—and most persons show some deflection from the normal orbit of well-being, a deviation which they share with their kindred—then there is a double chance of perpetuating in their offspring their weaknesses and susceptibilities, their tissue proclivities and disease tendencies.

The objection, then, to consanguineous marriages lies not in the consanguinity, as such, but in the danger of the partners possessing similar untoward qualities, but the same objection holds with all persons contemplating wedlock, even though they be not related who possess any morbid tendency in common. Perhaps the strongest argument against consanguinity being the cause of the defects usually ascribed to it, is the fact already referred to that deaf-mutism cannot, as a rule, be directly transmitted to the offspring, even in those cases in which both parents are deaf-mutes. It is chiefly by means of breeding-in that peculiarities of structure among the lower animals are perpetuated, and so easily and so certainly is their hereditary transmission effected that it would be difficult to assign a limit or to say what amount of abnormal development may not by this system be established as a permanent variety. It is, therefore, useless to contend that the consanguinity is the cause of deaf-mutism, or of any of the other diseases or defects from time to time ascribed to it. The true cause is heredity, intensified and raised, as it were, to its second power. Some of the evils attributed to marriages of near of kin may be traced to similar defects in some immediate ancestor, which, descending by the related partners, met in their embrace and appeared in geometrical increase in the issue. Other maladies, such as retinitis pigmentosa and deaf-mutism, though not recognised in the ancestors in the same form, may, for all we know, be nearly allied to conditions apparently unlike and undergoing transformation in transmission through the wedded relatives, appear with such intensity in the issue that it became a *family* disease.

It does not, however, follow that relatives, even when there is no hereditary tendency to

deafness or other defects, are well advised in marrying, for, as Darwin forcibly remarks, no one knows with certainty, until towards the end of life, what ills may lie hidden in his edition of the family constitution.

We may not inappropriately conclude this portion of our subject in the words of the renowned author of the "Descent of Man:"

"Man scans with scrupulous care the character and pedigree of his horses, cattle, and dogs before he matches them; but when he comes to his own marriage he rarely, or never, takes any such care. Though he is in so far superior to the lower animals that he highly values mental charms and virtues, on the other hand he is strongly attracted by mere wealth or rank. Yet he might, by selection, do something not only for the bodily constitution and frame of his offspring, but for their intellectual and moral qualities. Both sexes ought to refrain from marriage if they are in any marked degree inferior in body or mind; but such hopes are Utopian and will never be even partially realised until the laws of inheritance are thoroughly known. Everyone does good service who aids towards this end. When the principles of breeding and inheritance are better understood, we shall not hear ignorant members of our legislature rejecting with scorn a plan for ascertaining whether or not consanguineous marriages are injurious to man."

CANCER.

Widely divergent opinions are entertained by authorities of standing as to the heredity of cancer. On the one hand Herbert Snow states that "the belief in the heredity of cancer is derived merely from popular tradition, and is wanting in any sound basis of scientific proof;" on the other, the late Sir James Paget was wont to state that "we cannot over-estimate the importance of inheritance in the origination of cancer." And each of these distinguished authorities gave reasons for the faith that is in him. At a discussion on cancer at the Pathological Society some years ago Sir James Paget gave his experience on the heredity of cancer, as follows, namely, that "in his early practice, which was chiefly hospital work, he could reckon the proportion of cases with a family tendency to the disease as one in six; subsequently in private practice he found it one in four, and later still it became one in three." Some of his cases are very interesting. Thus, a lady who died of cancer of the stomach had seven children and thirty grandchildren; of these a daughter died with cancer of the stomach, two granddaughters with cancer of the breast, a grandson with cancer in the bladder, a grandson with cancer

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in the rectum, and a grandson with cancer in the axillary glands. Similar instances could be easily multiplied. But the occurrence of cases in families is not denied even by those who deny the influence of heredity. The facts are admitted, but the inferences deduced from the facts are disputed. The disease often occurs in families in whom there is no hereditary predisposition. Thus, according to Snow, when the families of non-cancerous persons are compared with those of cancerous subjects there is little or no appreciable differences in the number of cancerous relatives. At the London Cancer Hospital, Herbert Snow inquired into the family history of 1,075 cases of carcinoma in different parts of the body. One hundred and sixty seven, *i.e.* 15.7 per cent., stated that the disease had already occurred in their families, it being understood that the transmission was not always direct¹⁸, but that it had affected more than one member of the family. On the other hand among 175 patients who were under treatment at the same institution for non-cancerous affections, 46, *i.e.*, 26 per cent. admitted that cancer occurred in their families; and in two other series of 78 and 79 respectively, the former consisting of healthy medical men and the latter of patients with pulmonary disease, the relative percentages were 19.2 and 11.3. It will be at once evident that statistics of this kind are very uncertain. In many cases the history is based upon the mere statement or belief of the patient, and is not supported by the evidence of those who have actual knowledge of the family history. In the case of the non-cancerous patients no one could tell, but that they may in after life have fallen victims to the disease. In a disease which occurs so frequently as cancer, coincidence must come largely into vogue. Perhaps the question might be summed up as follows: The predisposition of the organism is to revert to the normal type. Diseases are never reproduced in the offspring with the same constancy and regularity that normal conditions are. Hence, even in families where hereditary morbid tendencies are strongest, most of the members usually escape. This is true of tuberculosis and it is also true of cancer. On the other hand, it is equally true that when an individual in whom a morbid variation appears leaves offspring these offspring are *ceteris paribus* more likely to vary again in a similar

way than are persons whose ancestors never experienced such a variation.

In glancing over the statistics already on record on the influence of heredity in the causation of cancer two features stand out prominently. The first is that in a certain percentage of cases the evidence is of such a convincing nature as to leave little doubt that it is at least a powerful pre-disposing cause. When we see families in whose members cancer develops in the same organs during several generations, and when the disease is exclusively confined to one side of the family, and even to one sex, it is difficult to exclude heredity. Thus Williams records the case of a woman, aged 53, with uterine cancer whose maternal grandmother, mother, mother's sister, and the patient's two sisters had all died of cancer of the uterus. Guttman met with cancer of the uterus in three sisters. Atthill relates the case of a woman, aged 28, with uterine cancer whose mother and two sisters all died of cancer of the same organ. Then there is the historic instance of the Bonaparte family, four members of which, father, brother and two sisters of Napoleon, died like the Emperor himself of cancer of the stomach. In the family of a lady medical student her grandmother, mother, two maternal aunts and two sisters all died of cancer. An American physician's paternal aunt, father and son all died of cancer. Dr. Barker knew of a family where eight members died of cancer. The late Dr. G. H. Barlow mentions a case where a lady was the fifth victim of cancer of the liver in two generations. The last case we shall refer to is that related by Broca: the mother died of cancer of the breast, of her four daughters two died of cancer of the liver, and two of cancer of the breast; of the third generation, ten members died of cancer. Similar cases could be easily cited; it is far more reasonable to attribute such cases to the influence of heredity than to mere coincidence.

The second feature of these statistics is that the percentage of cases in which the influence of heredity is striking is not a large one. Thus, of 1,127 cases reported by Paget, Cooke, Sibly, Lebert, Lafond, Hess, Moon and others, 192 or 17 per cent. were attributed to heredity. Bryant, in 600 cases, discovered only 12 per cent. Gross, in a little larger number, 9.7 per cent. The statistics of insurance companies show heredity in 9.3 per cent. Wood Hutchinson collected a series of 30,000 cases in which a hereditary history was present in 10.5 per cent. When we come to enquire how heredity acts in cancer-formation we raise the

(18) The cases of direct transmission were not numerous; of the 169 near relatives, the mother was stated to be cancerous in 57 instances, the father in 18, grandmother in 12, grandfather in four. There were only seven instances of more than one member of the family having been cancerous, and of these only two in which parent and grandparent had been both affected with malignant disease.

disputed question of the causation of cancer. If we accept the parasitic theory of cancer-formation, then the "malignant predisposition" would correspond with the "tubercular predisposition." But it must be admitted that none of the so-called discoveries of "cancer germs"¹⁹ have so far been able to withstand destructive criticism. In the words of Hansmann, they are all "degenerated cells, karyokinetic figures, white and red corpuscles, and finally normal carcinomatous cells," and he speaks of the parasitic theory as "already belonging to history." And Professor Adami in his recent address concludes that the parasitic theory has yet to justify the pre-eminence it has lately attained, even though cancerous growths are produced by the irritation of bilharzia ova. The embryonic tissue presupposed in Cohnheim's theory may, like an ordinary malformation, be transmitted. Indeed it was the transmission of malformations that first suggested to Cohnheim his brilliant embryonal theory. But although Cohnheim's theory is generally accepted as explaining certain homologous tumours, *v.g.*, myoma of the uterus,²⁰ and such heterologous ones as chondromata of the testicle and parotid, and although the theory is practically verified in one class of tumours, namely, dermoids and in many forms of cysts, still it can hardly be said to be applicable either to sarcoma or cancer; on the contrary, the more closely we reflect on the matter the more convinced we become that the cancer cell is rather an adult cell that has lost its specialisation and reverted to a primitive form, rather than that it is one endowed with persistent embryonic characteristics.

The essence of the cancer process, the heredity of which we are here principally concerned in, is perverted gland formation. Now, as we glance over the records of cancer in different organs, we note there is a well-marked regional tendency. Two organs in the female, the breast and uterus, and what we may call the mouth-parts in the male, head the

list in each, whereas the stomach comes second in both²¹. Have we any explanation of the extraordinary liability of these organs to cancer. Let us take the uterus and mammary gland first. What strikes us from biologic point of view in considering these organs, is that they decay in the human female or functionally die long before her organism dies. All her other organs may be enjoying their pristine vigour, she may herself be "well-preserved," while her uterus and mammary gland, as it were out of harmony with their environment, shrivel and decay. Now Herbert Spencer has shown that the entire organism holds in check the natural reproductive powers of the fixed cells of the body tissue, so that they never go beyond that point that is of greatest utility to the organism. When however from any cause that controlling influence is weakened, the primitive powers of the cells assert themselves. Nowhere in the nature is better illustrated the condition of weakened control than in these two organs, in the female at the menopause. Both uterus and breast have played their part in the economy. They have lived their life. They are no longer in harmony with the other portions of the organism. Is it any wonder that they take on action for themselves; perhaps the wonder is they do not do so oftener.

There is another point it is well to recall to mind, that both the uterus and the mammary gland are comparatively recent organs. The fusion of the Müllerian ducts that produces the uterus does not occur till we arrive at our own order. The mammary gland appears for the first time in the mammalian group. Now, Darwin has shown that organs that have been recently acquired are apt to vary widely and to be in a state of unstable equilibrium. Even in the individual the uterus and mammary gland are like some flowers, the latest to bloom and the first to fade, so that individually they are short lived, and ancestrally they are recent. It is scarcely any wonder then if with their function extinguished.

(19) Some investigators thought they discovered bacteria—others, especially modern ones, had it that it was a coccidium—the latest is that it is a yeast (*myxomycete*). Peiffer, after making a special study for fifteen years of the obligate cell parasites of the sporozoa group and of the growths caused by such sporozoa, declares that "among them was not numbered the true and exact cause of cancer." As to the parasites in human cancer and sarcoma, described by Max Schüller, it is well to recall that in all the growths which he has been able to produce so far, by inoculating animals with their cultures, the remarkable infiltrative character of true carcinoma has been conspicuous by its absence and a better case could be made out for their granulomatous character.

(20) The body of the human uterus, as we know, is composed of two (Müllerian) tubes fused together, which remain separate as the "horns" of all other uteri. As it is precisely this region which is the site of myomata the Fallopian tubes being almost exempt, Sutton thinks it extremely probable that these growths spring from embryonic remnants during the fusion of the tubes to form the body.

(21) According to statistics compiled by Williams from the four London Hospitals, St. Thomas', St. Bartholomew's, University College and Middlesex, the breast was the starting point of cancer in 40.3 per cent. and the uterus in 34 per cent. of all cases in the female. That is the two organs together are to be credited with 74.3 per cent. In the male the mouth-parts (tongue, lips, cheek, jaw) head the list with 40 per cent. of all cases that occur in him. The stomach comes a good second in both, with 18 per cent. in the female and 32 per cent. in males.

(22) According to the same authority cancer is not a disease of "completed" senility. After reaching its maximum in both sexes between 45 and 55 it shows a rapid decline. This would seem to show that a disturbance of the relation between the glands from which cancer originates and the organism itself takes place at this time, that is, while the glands decay the organism maintains a certain vigour and a certain amount of succulence. At any rate statistics show both in man and animals alike that the longer life and vigour are maintained after the cessation of the reproductive powers, the greater is the liability to cancer.

their food supply lessened, themselves decaying, while the remainder of the organisms enjoys its pristine vigour they would take an aberrant action. And if we consider the close resemblance there is between what takes place in cancer formation and the early formation of the mammary gland itself in embryo life, and its subsequent enlargement at puberty and at lactation, we will cease to wonder that this aberrant action results in cancer. The only difference is that in the one case the process is held in check for the good of the organism, in the other it runs riot, and against the organism. We may conclude, then, that in the uterus and mammary gland there is a special morphological liability for their acini to revert to a more primitive condition. The property that stands out most conspicuously in primitive epithelium is that of dipping down and branching through the mesoblast. No wonder, then, that cells returning to this condition should display the same powers though now perverted. In their reckless proliferation there is, however, always an attempt, however abortive, to form a gland.

In the other organs which have gained a bad pre-eminence in liability to cancer, there is generally some developmental reason for structural variability. Thus, let us take the stomach. When we speak of cancer of the stomach we to all intents and purposes mean cancer of the pylorus and neighbouring region. Ewald states nearly all the statistics agree that in about one-half of the cases the pylorus is involved; according to Brinton 60 per cent., Lebert 59.6 per cent., Katzenellenbogen 58.3 per cent., Luton 57 per cent." Wilks and Moxon state that the district to the right of a line drawn from the cardiac opening to a point four inches below the pylorus will include the starting point of the vast majority of cancers. The pyloric region is specially subject to stenosis of various kinds from the thickness of its muscular bands, from projection of its mucous folds, or there may be a congenital constriction. As Ewald says, there may be a round or slit-like contraction of the ostium pylori, or the muscular portion of the pylorus may be hypertrophied, and the pyloric portion may project into the duodenum like the cervix uteri into the vagina. The region is one of transition from the secretive epithelium of the stomach to the absorptive epithelium of the intestine. There are traces of a second chamber in the bulging along the greater curvature known as the *antrum pylori*. The region is also specially liable to ulcers; nearly 80 per cent. of gastric ulcers are situated either in close

proximity or within its borders. Altogether it is structurally variable and morbidly susceptible. And there are some who see in this region, with its thick muscular coat, in excess of present requirements, its bulgings, its folds, and pouches, the remains of the "gastric mill" of our crustacean ancestors, which still persists in the gizzard of birds and in the "grinding stomach" of certain edentate mammals, i.e., the Great Ant-eater²³ and some Armadillos.

The male mouth-parts (tongue, lip, cheek, jaw) also figure high in cancer statistics, 40 per cent. of all cases in men being attributed to them. It is well to bear in mind that this region in the male is notably modified by secondary sexual developments. The mouth-parts of the female are but an enlargement of the same structures in the child. As Darwin²⁴ says, "Throughout the animal kingdom, when the sexes differ in external appearance, it is with rare exception the male, which has been the more modified, for generally the female retains a closer resemblance to the young of her own species."

At puberty the general contour of this region changes in the male. The angles of the jaw become more prominent; the chin becomes square and deep, not only by increased growth of the alveolar part, but also by thickening of the submental portion, which enables the jaw to withstand the action of the masticatory muscles. These muscles themselves become now more prominent and stand out beneath the skin in bolder relief; so that, in a way, the male jaw is almost as characteristic as the male pelvis. Again, at this time, the vocal cords elongate in the male. Before puberty the vocal cords are not two-thirds the length of adult cords. The female larynx resembles the larynx of boys'. While the larynx is undergoing the changes of puberty, the boy's voice is said to crack. In eunuchs who have been deprived of the testes before puberty the voice does not undergo this change. The pomum Adami projects. The resonance cavities of the mouth and pharynx undergo a corresponding change to match the voice, the chin and lips become clothed with beard; in fine, the male face appears. After fifty years of age a retrograde change in all these characters sets in, so that the voice, lips and jaws of the old man become as infantile as that of the old woman, the teeth fall out, the lips and cheeks fall in, the alveolar

(23) See Mivart Elementary Anatomy, "The Alimentary System."

(24) "Descent of Man," page 221.

process is absorbed, the jaw itself becomes oblique, the angle obtuse. All these changes affect the old man relatively much more than they do the old woman, and some see in this relative change a reason why many areas of this region, richly supplied with both mucous and sebaceous glands, are placed in that condition of detachedness from the rest of the organism, which is so favourable for cancer formation. At any rate we have these facts, that in the human female three-fourths of cases of cancer that occur in her are to be attributed to two organs, the uterus and mammary gland, and that in the male 40 per cent. of all cases of cancer that affects him is to be attributed to the mouth parts—that these two regions, in many ways dissimilar, resemble each other in these—(a) that they are both modified by the sexual function, one set (uterus and mammary gland) primarily, the other, namely, mouth parts (tongue, lips, cheek, jaws) secondarily; (b) that they both undergo marked atrophy during the life time of the individual; lastly, that the stomach (practically the pylorus) comes next in each sex—in the cancer role—and we have seen that though there is here no extinction of function or any notable atrophy of structure, yet that it (the pylorus) is anatomically variable and pathologically susceptible, and there is some reason for considering it a “degenerate gizzard.” The deductions to be drawn from these reflections, while not conclusive, are suggestive and tentative, that while any gland-bearing epithelium may become the starting-point of cancer, yet this is far more likely to occur in regions where there is special morphological change, or where there is an ancestral basis; that cancer is perverted gland formation favoured by senile changes; that it is the question of senility of glands themselves rather than of the organism; that the source of danger is not in the simultaneous decay of the glands and the organism, but of one before the other; that nowhere is this condition better complied with than in the decay of uterus and breast in the “well-preserved” female. This would be quite in keeping with what has been stated in an earlier portion of this paper, that it is not improbable that inborn structural peculiarities exercise a wider sway in the causation of disease than is generally believed and that these inborn peculiarities having perhaps a morphological or ancestral basis tend to be transmitted to the offspring. Again since cancer depends so much upon the age of the individual and history of the organ attacked, does it not seem improbable that infection can be the only factor in its production. And if we except

chimney-sweeps’ cancer and smokers’ cancer, does not the irritation theory seem played out. When we reflect that epithelioma of the lip occurs in non-smokers who are relatively few in any community, that it attacks the opposite side of the mouth to that in which the pipe was held, that cigarette and cigar-smokers are not exempt, is it not reasonable to conclude that the pipe is at best but the proverbial last straw?

CLINICAL AND PATHOLOGICAL NOTES.

Case of Unusual Size of Fœtus, and Occipito-posterior Position.

On December 17th, 1901, I was called to Mrs. C., at 9.30 a.m.

Previous History.—Seven children born living, two miscarriages. One precipitate labour in which the placenta was born with the child and cervix lacerated.

Labour had begun at 1 a.m. the same day. The os was almost fully dilated and the head not engaged in the pelvis. The abdomen was very large. I ruptured the membranes, and after waiting an hour and a half, as little progress was made, applied the forceps. After trying at intervals for an hour I made little progress, and so removed the forceps and introduced my hand. I found the occiput was turned to the sacrum, so rotated the head with my hand with no difficulty, and then again applied the forceps, and after a hard pull succeeded in delivering the head. The shoulders then refused to move, so I again introduced my hand and found one arm doubled behind the back. I tried in vain to rotate the shoulders towards this arm so as to bring it to the front, so then hooked a finger into the axilla, and with great difficulty brought down the posterior arm from behind the back. The child was then easily delivered, but was dead. It weighed 14lbs, was 22 inches in length, the chest measured 16 inches in circumference, and the head 19.

The perinæum was not lacerated, and the mother has not had a bad symptom since delivery, but had paresis of one leg for some days afterwards. I record the case as the correct treatment in rectifying the occipito-posterior position lead to another difficulty in displacing the arms.

ARTHUR H. CLARKE, M.R.C.S.

Hobart.

Abdominal Aneurism—Paraplegia— Rupture.

J. R., *act.* about 48, was seen by me for the first time on 13th September, 1898. He complained of sudden loss of power in his legs. He had had syphilis, and had worked hard as teamster and contractor. He had had an aneurism of popliteal artery, which had been cured, by ligature of the femoral artery, in the Melbourne Hospital about year 1883. There was no trace of the aneurism in popliteal region, but a linear scar over the position of the femoral artery, at the apex of Scarpa's triangle, was in evidence. I gave him some potass. iodide. On September 20th he seemed fairly well. On October 2nd he was complaining more of a pain in epigastric region, and on this occasion attention was specially directed to this locality.

I made an examination, and informed him that he might have an aneurism there. A hard mass or tumour could be felt with pulsation communicated but non-expansile; no thrill could be felt, and no bruit could be heard.

This pain troubled him a good deal. He thought relief would be obtained by an aperient, so I ordered him 2 or 3 pills containing 5 grains of calomel. I advised him to rest. He took the aperient referred to, but not getting any or much result therefrom, he, in addition, took eight or ten Beecham's Pills, and also went into country against advice. When at his place in country he became exceedingly faint, and his companions thought he was dying. He was brought back to Millicent over a rough road, in bottom of a spring cart. When seen he presented the appearance of profound shock, face and conjunctivæ pallid, pulse frequent and feeble, legs completely paralysed, and he had most distressing pain in them. I believed him to be dying from rupture of the abdominal aneurism. He died about 6 a.m. next day. A *post mortem* examination was obtained, but performed under difficulties.

On opening abdominal cavity a large aneurism was found about size of a cricket ball, apparently entirely filled with firm laminated clot. I attempted removal of the aneurism, but this ended by pulling it off the spinal column, which formed the posterior wall of the sac.

The vertebral column had been eroded to the extent of penetration of the spinal canal, with subsequent paraplegia and accompanying sensory phenomena from pressure on cord by blood. The finger could be placed in the hole in the spine caused by the aneurism.

Extensive retroperitoneal hæmorrhage had occurred, but the exact site of rupture of sac was not ascertained, nor was the exact section of the aorta affected located, further than that it was close below the diaphragm. By proper *post mortem* an excellent and instructive specimen of the results of aneurism might have been secured.

J. A. THYNE, M.B., C.M. Edin.
Millicent, S.A.

MIRROR OF HOSPITAL PRACTICE IN AUSTRALASIA.

CRAIGEND PRIVATE HOSPITAL,
SYDNEY.

(UNDER THE CARE OF A. MACCORMICK,
F.R.C.S. ENG.)

CASE I.—Renal tumour, with symptoms resembling renal calculus; Nephrectomy; X Ray burn.

Male, aged 43, was admitted to Craigend House on August 16th, 1901. Patient had had repeated attacks of pain in the right kidney resembling renal colic. A skiagram had been taken which apparently shewed the shadow of a renal calculus. On August 17th, under anæsthetic administered by Dr. Maitland Gledden, the kidney was exposed through the usual incision in the right flank, and brought up into the wound. A distinct tumour the size of half a mandarin orange was found occupying the anterior and lower half of the kidney, apparently a sarcoma. No calculus was found. Nephrectomy was decided upon. The organ was completely freed from its bed, and the vessels and the ureter were separately ligatured with catgut, and the kidney removed. A drainage tube was inserted into the pouch, and kept in for 48 hours. The patient made a slow recovery; there was no constitutional disturbance, nor any discharge of pus, but the tissues were of low vitality, and the wound healed slowly, leaving a sinus for many weeks. At the time of the operation there was a large red patch, looking like a patch of eczema, on the front of the abdomen, mostly to the right of the middle line, which slowly progressed until a patch of the true skin, several inches in diameter, became involved. The outer portion of this slowly cicatrized, but there is still (five months afterwards) a large ulcer on the abdominal wall to the right of the umbilicus, covered with a parchment-like surface, and with callous edges, which shews little tendency

to heal. The patient is in a neurasthenic condition, with lowered vitality. He has been reading all the literature he can get on "X Ray burns," and has made up his mind that he will not be well for eleven months. He complains of pain of a burning, itching character in the abdomen, which interferes with appetite and sleep.

Case II.—A "Kink" in the right ureter; symptoms resembling renal calculus; nephrectomy; recovery.

A man, aged 62, was admitted to Craigend House on October 12th, 1901. The patient was a thin, wiry man, and looked as if worn with pain. He had had frequent attacks of pain in his right kidney, and a skiagram showed a shadow resembling that of a calculus. On October 13th an anæsthetic was administered by Dr. Jenkins, and the right kidney exposed. Some difficulty was experienced in bringing it up into the wound. No calculus could be felt and the pelvis was explored through an incision in the convex border, with negative results. An attempt was made to pass a bougie through the ureter into the bladder, but failed. Further exploration revealed a sharp "kink" in the upper end of the ureter. The question of transplanting the ureter to another part of the pelvis was discussed, and considering the fact that the kidney had been split in the search for a calculus, and also considering the patient's age and enfeebled condition, it was thought that removal of the organ gave him the best chance, especially as the other kidney was healthy. The vessels and the ureter, below the "kink," were separately ligatured with catgut, and divided. After removal the kink remained very distinct. A drainage tube was kept in for twenty-four hours, and the patient made an uninterrupted recovery, leaving the hospital in three weeks quite free from his old pain.

Remarks.—In the *Annals of Surgery* for January, 1902, Huntingdon, of San Francisco, reports a case of X-Ray burn which he successfully treated by excision, and quotes Rudis-Jacinski, who says that "X-Ray burn is coming to be regarded as a misnomer, as the lesion consists in an acute, sub-acute or chronic necrobiosis depending upon irritation of the peripheral sensory nerves with secondary paralysis of the vaso-motor system of affected areas."

It is evident from the low vitality of the operation wound, in the first case, that the deeper parts were affected similarly to the skin and subcutaneous tissues. The skiagram in each of these cases showed a distinct shadow as of a calculus, and in the second case induced one to split the kidney, as one naturally expected to find a stone from the appearances

presented in the skiagram. That again led to the decision to remove the kidney, which was safer in a feeble old man, with a partially damaged kidney, than to undertake the more conservative measure of uretero-plasty.

REVIEWS AND NOTICES OF BOOKS.

AN INDEX OF SYMPTOMS AS A CLUE TO DIAGNOSIS.

By R. W. Leftwich, M.D., late Assistant Physician to the East London Hospital for Sick Children. Second edition. Smith, Elder and Co., London, 1901.

This small work has reached a second edition, and we must confess some surprise that a book of this nature should command the attention of so large a number of medical practitioners. In our opinion, the use of a book of this kind will not tend to elevate the scientific standing of students or practitioners of medicine. The concluding part of the work on the methods of diagnosis is much too brief to be of any real assistance to students, and certainly will not be of service to any one who has received a careful training at the bedside in the principles of physical examination and diagnosis. The multiplication of books of this class is not to be commended. G.E.R.

SYPHILIS AND OTHER VENEREAL DISEASES. By H. de Méric, M.R.C.S. Eng. Surgeon to the French Hospital, London, etc., etc. London: Baillière, Tindall and Cox. Price 5s. net.

This work of 132 demy octavo pages is divided into fifteen chapters. It is chiefly an elaboration of the author's "Notes on Venereal Diseases," published in 1889; but the two important chapters on the "Prophylaxis of Syphilis," and the "Contagious Diseases Acts," are new. The author, in the preface, expresses surprise at the diffidence of medical men in England in publishing works on venereal diseases, and at the half-apologetic tone in which they write on them; especially when it is considered how much the future health of the individual depends upon a proper treatment. The author has endeavoured to set down in as concise and practical a manner as possible the results of his observations on venereal diseases, both in private practice and at the French Hospital in London, and it may be said he has succeeded in his efforts. In the first chapter the diagnosis between "hard" and "soft" chancres, or as he prefers to call them "simple" or "local" chancres, and "syphilitic" chancre; the former almost always multiple, the latter almost invariably single. The author does not lay so much stress upon the frequency of a "mixed infection" as appears necessary, judging from the very large proportion of apparently "simple" chancres (with suppurating buboes), that is followed by secondary syphilis, met with in the out-patient departments of our Sydney Hospitals. The chapters on treatment will be found very practical. As to the "Prophylaxis of Syphilis," the author thinks that the only efficient way of preventing the spread of this disease is the rigorous application of the Contagious Diseases Acts in garrison and sea-port towns. The experiments of Perry, Laval, Auzias Turenne, Sperino, Vieworovsky and others are discussed, and for the most part condemned, as the author thinks "that any project of serum therapy in the direction of immunizing healthy persons against syphilis had perhaps better be left severely alone." In discussing the Contagious Diseases Acts, the author advocates the establishment of large venereal hospitals near large centres of population where prostitutes could go for treatment, and where they would be treated kindly. W.H.C.

INTERNATIONAL DIRECTORY OF LARYNGOLOGISTS AND OTOLOGISTS, containing the names and addresses of practitioners engaged in the study and practice of laryngology and otology. Compiled by Richard Lake, F.R.C.S. Eng. Second edition, revised and enlarged. London: Rebman, Limited, 1901.

This directory is published under the auspices of the *Journal of Laryngology, Rhinology and Otology*, and as far as it goes is a useful book of reference. In the preface to the edition it is admitted that the list (especially the British) is far from complete, and that this is due to the fact that the editors of the *Journal of Laryngology, Rhinology, and Otology* felt that in this edition, as in the former, the name of no resident in Great Britain interested in the specialities should be included who had not given his sanction to the same. On turning to Australia we find one specialist is accredited to Balmain, one to Brisbane, two to Melbourne, and one to Sydney. Adelaide being conspicuous by having no representative at all. In future editions we shall probably find that if only in pure self defence many practitioners of these specialities who have hitherto refrained from doing so will see that their names are not omitted.

G.T.H.

GOLDEN RULES FOR DISEASES OF CHILDREN. By George Carpenter, M.D., M.R.C.P. Lond., Physician to the Evelina Hospital for Sick Children, London. Bristol: John Wright and Co., 1901. Price, 1s.

This is one of the "Golden Rules" series of books published by the well-known firm of Wright and Co., Bristol. So far as it goes the book is reliable, the rules are judicious and practical, and many useful hints on the diagnosis and treatment of disease in children are given. The chief use of a work of this kind must be for students preparing for examination, and for young practitioners entering upon practice.

ELEMENTS OF PRACTICAL MEDICINE. By Alfred H. Carter, M.D., M.Sc., F.R.C.P., Professor of Medicine, University of Birmingham, and Senior Physician to the Queen's Hospital, Birmingham. Eighth edition. London: H. K. Lewis, 1901.

This well-known student's manual has now reached its eighth edition, and this fact would seem to show how popular the work has been for the last twenty years. It is only intended to be an introduction to the more exhaustive treatises, and the author has succeeded, with the assistance of his colleagues and friends, in producing this edition, well brought up to modern requirements.

CLINIQUES MEDICALES ICONOGRAPHIQUES. Par M. M. Haushalter, Etienne, Spillmann. Agrégés à la Faculté de Médecine de Nancy; et C. Thiry, Ancien Interne des Hôpitaux de Nancy. Fascicule 1 avec Planches 1-7. Paris: C. Naud, 3 Rue Racine, 1901.

This is the first part of an Atlas of Clinical Medicine by some well-known members of the Faculty of Medicine of Nancy. It does not pretend to be a complete treatise on medicine, but is intended to illustrate different diseases, and in the complete work some 300 diseases will be illustrated. The text which accompanies each plate is subordinate to the illustration, and is only intended to be a short resumé, pointing out the important features of the disease as represented in the figures. The illustrations are all reproductions of

photographs of patients, and are excellent. The descriptions of the plates are clear, and the salient points well emphasized. In this first part the different types of muscular atrophy are illustrated and differentiated. The work will take rank with the best volumes which have been written on Clinical Medicine.

G.E.R.

PATHOLOGIE GENERALE ET EXPERIMENTALE. LES PROCESSUS GENERAUX. Par M. M. A. Chantemesse, Professeur de Pathologie Expérimentale et comparée à l'Université de Paris, et W. W. Podwysotsky, Professeur de Pathologie Générale à l'Université d'Odessa. Paris: C. Naud, 3 Rue Racine, 1901.

This is the first volume of a book on General Pathology, by a well-known Parisian Professor of Pathology in association with a Russian Professor. The authors state in their preface that they are not dealing with the description of morbid processes, but, taking as the point of departure the functions of each organ or tissue, they deal with the alterations of function of the different organs in each morbid state; that is, general pathology bears the same relation to pathological anatomy that physiology does to anatomy. It will be seen, of course, that no sharp line of demarcation can be drawn. Such a book as this, is necessarily based largely on experiments on animals, and it deals with those fundamental problems of pathology, which are still exceedingly obscure.

The book begins with a description of the physiology of the cell, which is very well illustrated. Then follows a chapter on the general etiology of disease, which is almost entirely occupied by an account of the influence of heredity in producing disease. One naturally turns to what is said about tuberculosis and syphilis. Both these questions are very fully and impartially discussed, but one cannot help feeling how much of hypothesis and how little of fact there is in our knowledge of these important and interesting questions.

The greater part of the book is occupied with an account of the various degenerations of the cell, including lardaceous and horny, mucoid, colloid, glycogenic, pigmentary, and fatty. The account given of lardaceous degeneration is very good, and very well illustrated. In the chapter on horny degeneration, particular attention is directed to the various cell inclusions, which degenerating squamous epithelial cells show, and which are particularly common in cutaneous epitheliomata, being simply due to the ordinary process of degeneration of the cells. These are the bodies which were formerly described by some observers as cancer parasites.

Next there is a chapter on concretions and deposits, including renal and biliary calculi. The book concludes with a section on necrosis, mortification, and gangrene. Each chapter is accompanied by a very full and complete bibliography.

As usual with French books, the style is very clear, but quite the most remarkable feature of the book are the coloured illustrations. These are very numerous, and of most unusual excellence, reminding one of the illustrations in Woodhead's "Pathology."

We would only make one criticism on this most excellent and thorough book: it is too long. The reader might have been referred to other books for a description of the minute anatomy of the cell, and for a discussion of the various theories of heredity. The style also is somewhat diffuse. The whole book might have been condensed with advantage.

J.M.G.

THE AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, 20TH JANUARY, 1902.

OURSELVES.

WITH this number the *Australasian Medical Gazette* enters upon the twenty-first year of its existence. Originally started by Mr. L. Bruck, it was purchased some six years ago by the New South Wales Branch of the British Medical Association at the suggestion of the late Dr. L. R. Huxtable, at that time the energetic honorary secretary of the Branch. It was carried on successfully for some years under the editorship of Dr. S. T. Knaggs as the *Journal of the Australasian Branches of the British Medical Association*. In August last Dr. Knaggs resigned his appointment as editor, and the present editor was appointed by the Council of this Branch in October last. We have to thank our many friends for valuable assistance rendered to the *Gazette* in the past, and for the kindly words of welcome and approval of the innovations in the last two issues under the new regime. We would remind our readers that the *Gazette* is the organ of all the Branches of the Association in Australia, and no effort or expense will be spared in the future to make the *Gazette* the most widely circulated and influential medium for the full discussion of scientific medical questions, medical politics, and medical news in Australasia.

Arrangements are now in progress for securing full information on medical matters in all the States as well as in New Zealand; and we hope shortly to be brought into direct touch with the medical world in Great Britain and America. Special arrangements are being made to secure a full report of the important discussions which will be held at the approaching Congress in Hobart, and with this issue we

publish a special Congress supplement, which we hope members attending the Congress will find useful at the meeting, as well as a memento of the visit to Hobart on this occasion. A copy of this issue is being sent to every practitioner whose name and address is known in Australasia and New Zealand, and we shall gladly send a specimen copy of the *Gazette* to any medical man who does not receive it.

THE PROPOSED AUSTRALASIAN MEDICAL ASSOCIATION.

As will be seen on reference to our Special Congress Supplement, the motion bearing on the proposed Australasian Medical Association is to be proposed at the last evening meeting of Congress at the close of the discussion on cancer, and will only be brought forward if sufficient opportunity is offered. The proposal has not been received with anything like general favour, and from a report in another column of this issue of the special meeting of the New South Wales Branch of the British Medical Association called to discuss the question, it will be seen that this Branch is unanimously opposed to it. The opposition to it is not confined to members of the New South Wales Branch. As stated by some of the speakers, it would be extremely difficult to formulate any constitution which would likely meet with unanimous approval in all the States. The great distance between the capitals alone would render it difficult to secure a quorum at the meeting of the managing Council of such an Association. An annual Congress in place of a triennial one, moreover, would not meet with the same amount of support, nor would the meeting likely be attended by so large a number of medical men as at present. The condition of things in England, of course, is very different. There, a very large number of medical men reside within a comparatively short distance of one another, and of the central place of meeting,

but even there the number of members of the British Medical Association who attend the annual gatherings in the different towns is only a small fraction of the total membership of the Association in Great Britain and Ireland. In Australasia the long distances to be travelled would necessitate a medical man being absent from his practice for two or three weeks, and in these days of keen competition this is what very few medical men can afford. But a further strong argument against the proposal is that if such an Association were formed it would practically mean the disruption of the present State Branches of the British Medical Association, and the severance of a very large number of members from the Association, with no corresponding benefit. We esteem it a high honor and privilege to belong to the great British Medical Association, which has done so much for the welfare of the profession throughout Great and Greater Britain, and we should not appreciate severing our connection with such a world-wide and influential Association. Even the combination of all the Australasian Branches of the British Medical Association in one large Australian Branch, with sub-branches in the different States would, we think, be impracticable, and the best work and best results will be obtained by the different Branches continuing their steady work in their own States, and endeavouring to embrace every member of the profession in the Association, which is not the organisation of any party or clique, but whose sole object is the furtherance of professional brotherhood.

THE BOYCOTTING OF THE BRISBANE MEDICAL INSTITUTE.

THE Queensland Branch of the British Medical Association is to be congratulated upon the results of the discussion which was held at its last meeting, particulars of which appear in another part of the present issue. The meeting was a representative and largely-attended one,

so that the resolutions are practically certain to be ratified at the February meeting, the clause requiring such ratification being a well considered addition to the main resolutions. After the February meeting, when it is hoped that the same unanimity will prevail, it will be quite impossible for any member of the Branch to plead ignorance as an excuse for his action in continuing to meet in consultation the medical men who serve the Brisbane Associated Friendly Societies' Medical Institute. It is also the intention of the Branch to acquaint by circular every member of the profession in Queensland of the stand taken by the practitioners of Brisbane, by doing which the hands of practitioners in other towns where medical institutes are in existence will be strengthened. Already there is a feeling of disquiet in the minds of the executive officers of the Brisbane "Institute,"—they do not wish it to be known that by taking office in their service, medical men place themselves on a level which carries with it a sense of degradation. The Secretary of the "Institute" has expressed his unwillingness to give a copy of the agreement to a member of the Branch for the reason that a more satisfactory agreement is in course of preparation. The action of the Queensland Branch can have only a good effect upon the terms of the new agreement, unless the executive of the "Institute" blindly decide to take up the gauntlet in which the branch resolutions are enclosed. It is possible, also, that benefit may accrue to those medical men who hold club appointments unconnected with the "Institute," some at least of which are held under unsatisfactory conditions—guinea confinements, absence of wage limitation, inclusion of anæsthetics and of all operations, fee-less examination for admission to the lodge, insignificant mileage rates, the custom of calling for tenders for such appointments, and so on, all of which require modification in the interests of the profession and of the public. A word of

praise should be accorded to the senior members of the profession in Brisbane for the cordial manner in which they have supported this movement, since to many of them it is a matter of personal (monetary) indifference; from the point of view of the profession it is mainly to the advantage of its junior members that success is desired. It is not surprising that a young man, whose financial resources have been entirely exhausted by the prolonged and expensive education which he has necessarily undergone, and who finds that the beginning of his troubles is synchronous with the attainment of his degree or diploma, should accept an "Institute" appointment, in ignorance of the degrading nature of his service, and of the slur which he unwittingly places upon his name and the value of his work—a slur which a long life will with difficulty remove. That such a condition of ignorance may no longer exist it is desirable that during the fifth year of his career, the student should have an opportunity of attending a short course of lectures upon ethical and kindred subjects delivered by a practitioner whose motives were above all suspicion of prejudice. We congratulate the Queensland Branch on the firm position which they are taking up, and wish them success in the fulfilment of their laudable desires.

THE MONTH.

The Medical Defence Association of Victoria, Ltd.

JUDGING from the last quarterly report of this Association, it would appear to be a most vigorous institution, and to do a large amount of work which in other States is done by the Branches of the British Medical Association. Amongst the subjects which have occupied its attention during the last quarter are, the matter of prescribing by chemists, the issuing of a "black list," the raising of the rates for women's lodges, etc. The profession in Bendigo is at war with the Bendigo United Friendly Society, and is endeavouring to raise the rate of remuneration of the medical officers. The result of the united efforts of the profession has

been to reduce the number of applicants, and to lower the standard of men who are applying for this lodge. The matter of fees to be paid for examinations for life insurance has also been under discussion, and it was resolved that no further action be taken at present in the matter of life insurance fees. As regards burials without medical certificates the council forwarded the following recommendation to the Solicitor-General: "That no Deputy Registrar shall register a death or still-birth without medical certification, and that where the certificate is not filled in by a registered medical practitioner, the Deputy-Registrar must report to some such officer as may be held most desirable *e.g.*, Coroner or police officer." The Council accepted the resignation of Dr. W. L. Mullen with regret, and recorded its high appreciation of the zeal and interest he had always shown in the Association and the sound legal advice he had given it.

The North Sydney Water Famine.

During the past few weeks the inhabitants of North Sydney have been suffering acutely from a water famine, but we are glad to note that the very serious state of matters as regards the water supply has been remedied, at any rate temporarily. It is not necessary to point out how serious from a sanitary point of view a shortage of water at this time of the year is to all classes. There has not only been a deficiency of water for the morning bath, but the amount available for food and drink has been very small; and what is of still more serious moment the water closets have been choked up in such a way as to render life anything but pleasant. The trouble appears to have arisen, not from the general shortage of rainfall but from a defect in the pumping arrangements and in the size of the water pipes. This can only have been due to a want of foresight on the part of the officers responsible for the control of the water supply and sewerage, for the rapid growth of the northern suburbs in recent years has been a matter of common knowledge and comment, and provision should have been made years ago for an efficient water supply. Now that matters have reached the present crisis, it is absolutely necessary that the whole of the water supply and sewerage systems of the city and suburbs be thoroughly investigated by some independent authority, for recent events have shaken the faith of the inhabitants in the present Water and Sewerage Board, and we know not when some similar serious break down may affect not only one suburb, but perhaps the whole of Sydney.

A New Morgue for Sydney.

Up to a short time ago Sydney had two morgues, the South Sydney morgue in the Devonshire Street Cemetery overlooking Belmore Park; and the North Sydney morgue situated on the western side of the Circular Quay. The former, which was the most convenient and better of the two in every way, has been demolished in consequence of the site being required for the new city railway station, and the North Sydney morgue has had to do duty for the whole of the city and suburbs. This building is inconvenient in situation and construction, and quite unfit for the important work which has to be carried on in it. The need for a new and commodious morgue in the centre of the city has long been felt by those who are engaged in the medico-legal work of the Coroner's department. A short time ago a proposal was made that a morgue with all necessary appliances for pathological work should be erected in the north-west corner of the University grounds facing Parramatta Road. The Senate however refused to consent to this, and the matter is again in abeyance. A more central site and one which has much to commend it, is the south-east corner of the Domain in Woolloomooloo, which is in a quiet part of the city, and is convenient of access both by land and water. We hope that the Minister whose province it is to deal with this matter will lose no time in securing this or some equally central site, and in erecting a building fully equipped in every way for important medico-legal *post mortem* work, and providing for a suitable Coroner's Court and offices.

The Thomas Walker Convalescent Hospital, Sydney.

Since this hospital was opened eight years ago 6491 patients have been received, and of these only seven have died. The number of patients treated during the year ending September 30th, 1901 was 979, which is an increase of 61 over that of the previous year. Of these, 791 were discharged cured, 109 relieved, and 5 unrelieved. There was one death, the patient being a man of 64, who died from suppuration and exhaustion following an operation for hydronephrosis. There were 72 remaining in the hospital on September 30th, 1900, and 73 on September 30th, 1901, the average daily resident being 75. During the recent epidemics of influenza and pneumonia large numbers of convalescents from these diseases were admitted to the hospital, and many convalescents from typhoid were rapidly restored to health. The hospital proves

a great boon to many also who have undergone some surgical operation, and to whom fresh air and good food are of the highest importance. The hospital has had to deplore the death of Dr. C. Dagnall Clark, of North Sydney, one of the honorary examining physicians since its establishment. Dr. Newmarch has succeeded Dr. Clark on the honorary medical staff. Dr. Spiers Kirkland, resigned his appointment as one of the visiting medical officers and Dr. Sydney Littlejohn, of Croydon, has been appointed to the vacant position.

The Coast Hospital, Little Bay, Sydney.

The report of the select committee appointed by the Legislative Assembly of New South "to inquire into and report upon all the circumstances connected with the removal from the public service of Mr. Glynn, late assistant storekeeper at the Coast Hospital, and on the action of the Public Service Board and Chief Medical Officer to the Government in connection with the exposures made by Mr. Glynn" contains some serious reflections on the officials of the Health Department. It would appear that there has been some laxity in the matter of supervision of the character of the food supplied to this institution, and that some confusion has arisen from the fact that the Board of Health officials in specifying in the contract "dairy butter" and "fresh eggs," showed ignorance of their duties, as both of these are trade terms for second-grade articles, the first-grade being designated "factory butter" and "new laid eggs" respectively. It is not a desirable state of things that what is, after all, now a general hospital should be under the control of the President of the Board of Health. The management of this hospital and of the Asylums for the destitute and infirm should be vested in a Board of Charity Commissioners, and detached altogether from the Board of Health.

The Newington Asylum for Destitute Women.

This is the only public institution in Sydney where infirm and destitute women are received, and it is a matter of urgent necessity that some other institution or some modification in the present system of management of the Newington Asylum should be provided. Many very poor but respectable women positively refuse to enter the asylum in consequence of the prevailing conditions, and prefer to starve outside than accept the coldest charity of this institution. We sincerely hope that some attempt will be made at once to improve the lot of the destitute women at Newington.

THE FIGHT AGAINST TUBERCULOSIS IN AUSTRALASIA.

III.

South Australia.

THOUGH it is only during the last few years that the crusade against consumption has had a definite and specific character, yet it has, in reality, been carried on ever since the early days of sanitary reform. A new colony begins with Arcadian simplicity, only to find, in a few years, that it is accumulating the evils of "Civilization" common to older countries. In time there comes a period of awakening, and an effort is made to get rid of evils which ought not to have been allowed to exist. Now all these efforts have been attacks directly or indirectly against tuberculosis. Whether it has been Parliamentary enactment or local by-law, whether it has been to improve drainage, prevent overcrowding or cause the erection of healthier buildings, all have united in reducing the mortality from consumption. The study of the mortality returns from phthisis in South Australia are interesting. Instead of being reduced by the various sanitary reforms, the death-rate slowly mounted up till in the year 1888 it reached its climax of 1.19 per thousand, then for several years it oscillated till in 1895 it began to go steadily down, and last year with only .84 per thousand it reached the lowest point for a great many years. It might be a matter of surprise that in England the phthisis death-rate began to decline as early as 1838, when the first efforts for sanitary reform were made, reaching in that year the enormous figure of 3.8 per thousand, it gradually fell till in 1895 it was only 1.4. But it must be remembered that consumption is a disease of "Civilization," with its attendant evils of overcrowding. The effect of over-crowding had been fully felt in England as early as 1838, and as slowly but surely sanitary reforms were put into force the death rate fell. But here, the evils of civilization increased at a greater rate than legislation was able to cope with, and it is only within the last decade that it has been possible to turn the tide. It is difficult to say how far immigration affects the death rate from phthisis, but I would say that at least ten per cent. of the fatal cases are imported.

The year 1898 was a memorable one in South Australia, for then the new Health Act, with clauses bearing directly on the subject, was passed. Dr. Borthwick, Medical Officer of Health for the City of Adelaide, states:—

"The Health Act of 1898 contains certain sections which have a direct bearing on

tuberculosis. Sections 99 to 115 inclusive refer to tuberculosis in animals, and are known as the meat and milk clauses, while sections 128, 131, 132 and 133 refer to pulmonary tuberculosis in man, and are known as the Campbell clauses, in recognition of the special interest the late Hon. Dr. Allan Campbell took in securing their inclusion in the Act. The latter sections may be fitly considered first. The powers and duties imposed may be summarised as follows:

"It is compulsory on medical men to report every case of pulmonary tuberculosis coming under their notice to the local Board of the district in which the patient resides. The local Board has power to order and supervise the disinfection of the house, or part of the house, and also its contents, and it may defray the whole or part of the expenses as it sees fit. Articles may be removed from the house for disinfection elsewhere if necessary, and disinfecting apparatus may be provided by local Boards, acting singly or in combination; or, when such apparatus is otherwise available, its use may be arranged for. When a case of pulmonary consumption is certified by a medical man to exist in a building used for the storage of milk, or for the storage or manufacture of butter, cheese, or other article of human food, the local Board, with the sanction of the Central Board, may order the building to be closed if there is reason to believe that the milk or other products may be contaminated. The building remains closed until the patient is removed, and the Officer of Health certifies that all precautions have been taken to prevent contamination. Finally, local Boards have power to make arrangement with any laboratory to have the expectoration of patients examined for the tubercle bacilli. It should be noted that this disease is subjected to any of the other provisions in Part VIII., which refer to infectious diseases. That is, patients suffering from pulmonary consumption are not liable to isolation, nor are their movements in any sense restricted.

"While these powers are fairly comprehensive, their effectiveness must, of course, depend on the administration of the Act. It is impossible to speak for the State as a whole, but the following are the methods adopted in the City of Adelaide. When a case is reported, the first step taken is to enquire of the medical attendant whether he has any objection to the patient being visited by the Health Department's officer. This precaution was introduced to overcome any latent distrust in the policy of notification as leading to undue interference.

If the medical attendant expresses no objection to the routine methods, the city trained nurse proceeds to the house, taking with her a copy of the printed instructions relating to disinfection and other precautionary measures which she carefully explains to the patient or the patient's nurse. She also supplies poor persons with such disinfectants as are needed, and shows how to use them. Any insanitary condition of the premises is noted and dealt with. The nurse further maintains a more or less continuous supervision over the case from a public health standpoint, so as to secure effective observation of the necessary precautions. On the other hand, should the medical attendant desire that his patient should not be visited, he is supplied with the printed instructions and requested to deliver them to the patient or some suitable person in the house. Experience has shown that when a medical man undertakes this responsibility, he invariably carries it out faithfully. Medical men are encouraged by payment of a fee to notify removal of patients from one house to another; so that every house vacated on account of death or otherwise is disinfected by the Department before it (or it may be only the patient's room), is occupied by another person. The extent of disinfection depends on the measure of isolation of the patient in the house. It always includes the bedroom and frequently another room; and in the poorer classes of houses the opportunity is taken of thoroughly renovating them."

"The numbers of deaths for the two years ending 30th September, 1901, were respectively 70 and 67, and of notifications for the same periods 72 and 116. This may be taken to indicate that notification is increasing in favor; and it is gratifying to be able to record that no friction has occurred between the Department and the medical attendant or the patient. It need hardly be added that the work would be much facilitated by the provision of further isolation accommodation with power to remove the poorer patients from small and overcrowded houses.

"The meat and milk clauses are, of course, supplementary to the Campbell clauses.

"The diseases of animals specified include tuberculosis, and the following is a *résumé* of the powers and duties:—

"It is compulsory on owners to give a written notice to the local Board as soon as they discover that their animals are diseased, and to isolate such diseased animals pending the action of the local Board. The officers who are charged with the execution of the work

under these sections are (1) a Chief Inspector of Cattle, who shall be a veterinary surgeon, appointed by the Governor; and (2) an Inspector of Cattle, who shall be approved of by the Central Board, appointed by the local Board. The appointment of the latter officer is optional on the part of the local Board. In order to satisfy himself as to the presence of disease an inspector of cattle has power to apply all necessary tests, not only to suspected animals, but to the whole herd. When he is satisfied that any animal is diseased, he shall order the owner to kill the animal and destroy its carcass. The owner has, however, power to demand that the inspector shall apply the necessary tests before the carcass is destroyed. If it be found to be free from disease its value may be recovered by the owner from the local Board, the value of the carcass being deducted from the compensation recoverable. In order to facilitate inspection of meat, public slaughter-houses may be erected by individual or combined local Boards, and provision is made whereby other meat may be prevented from being sold in the district. It is also rendered a penal offence to sell for food a diseased animal or any meat from it. In regard to milk, the same diseases apply to cows as to cattle, with the addition of ulcers or other diseases of the udders. The Act renders it illegal to supply milk to any person from a diseased animal, or to mix such milk with other milk either for consumption as milk or for butter or cheese-making, or to give such milk to other animals for food unless it has been boiled for ten minutes, and the local Board notified of the intention so to use the milk. The local Board has power to provide for temporarily prohibiting the sale of milk if the Officer of Health certifies that there are reasonable grounds for believing that such milk is causing the spread of infectious disease. It has also power to make regulations for the protection of milk from contamination and adulteration, etc. Finally, it is illegal to keep milk in a room used for sleeping purposes, or in any place or manner likely to render the milk unwholesome.

"It must be admitted that very little has been done in the direction of the construction of abattoirs and the efficient inspection of meat. The city has a bill authorising the erection of abattoirs under consideration, and the various local bodies of the metropolitan area have combined with the city to place the milk trade on a satisfactory basis. A fully-qualified veterinary surgeon with special training in regard to milk processes has been appointed, and already he has done good work in improving

the sanitary condition of the metropolitan dairies.

"Many tuberculous cows have been weeded out, and as time permits he will devote special attention to this disease among cows.

Thus it will be seen that, notwithstanding Koch's dictum as to the small importance of this portion of the work, steps are being taken to minimise whatever risk exists, at least within the metropolitan area."

Already the Act has been fruitful, and the clauses compelling notification and disinfection will prove each year more fully their inestimable value.

In the fight against tuberculosis we would place as of prime importance, sanitation and legislation, and second to that we would place the institution of sanatoria. More than six years ago a home for consumptives was opened at Belair, seven miles from Adelaide. It was founded and endowed by the late Mr. and Mrs. James Brown. Originally built to accommodate 16 patients, it has been increased till at the present time there are 28 inmates, and when two new wings—one in process of construction and one contemplated—are complete, we will have a sanatorium to accommodate 50 patients, situated in one of the best climates possible, and constructed and equipped for the most part in the most approved manner, second to none in the Australian States.

A private sanatorium is contemplated, and will probably be opened by the end of the summer.

The results obtained at the Belair sanatorium cannot be compared with those of German sanatoria, for patients are taken in all stages, and many have been allowed to remain to the end rather than send them to unsuitable homes. Nearly 250 patients have been treated, the average stay being four months, only about 40 patients have been discharged as cured, the greater number of which have remained well ever since, while a great many more have been so much improved as to be able to return to their work. It is impossible to exaggerate the value of such a sanatorium. Not only are patients isolated and many cured, but it serves as a centre for the dissemination of knowledge concerning the treatment and prevention of consumption, not only the patients, but their friends also have firmly impressed upon them the value of fresh air and cleanliness, and have an object lesson as to the amount of exposure that the human body can endure with advantage.

The medical profession cannot alone carry on the fight to a successful issue, they must have

the assistance of well-informed laymen, and for this purpose a society, on the lines of the National Society for the Prevention of Consumption will shortly be inaugurated.

Another matter of prime importance is the care of incurable cases, especially those having no suitable homes. The Government have the matter under consideration, and intend shortly to provide the necessary accommodation.

When these various schemes are in full working order, South Australia will be prepared to carry on the fight against tuberculosis in real earnest.

BRITISH MEDICAL ASSOCIATION NEWS.

PROCEEDINGS OF AUSTRALASIAN BRANCHES.

Victoria

THE annual meeting of the Victorian Branch of the British Medical Association was held at the Vienna Café on 20th December. The President (Dr. Neild) was in the chair.

The TREASURER (Dr. Cuscaden) read a statement of accounts, which showed a balance to the credit of the Society of £192 2s. 4d., with an increase of 20 new members.

The election of office-bearers then took place, with the following result:—President, Dr. Macanish (Brighton); Vice-President, Dr. Weigall; Council, Dr. Neild, Dr. Willis, Dr. Dyring, Dr. Ramsay; Hon. Treasurer, Dr. Cuscaden; Local Editor *Australasian Medical Gazette*, Dr. Bryant; Hon. Secretary, Dr. Vance.

The report of Council for year 1901 was then presented by the Secretary, and the business of the meeting concluded with the address of the retiring President (Dr. Neild). See page 1.

On the invitation of Dr. Neild, the members partook of a nicely-arranged supper, at which the healths of the retiring President (Dr. Neild) and the newly elected President were proposed and received with great good will. The healths of the other office-bearers were also honored in a similar fashion, and with the expression of feeling that all old troubles might pass away, and the profession, as a whole, might come into closer communion for their common good, the meeting broke up.

REPORT OF COUNCIL FOR YEAR 1901.

"In presenting the annual report to the members of the Victorian Branch, your Council have very great pleasure in congratulating them on the very successful year which the Association has passed through. Not only have a large number of new members been elected, but several old members, who saw fit some time ago to resign their membership, have again rejoined the Branch.

"Many events of national importance have happened during the year, not the least of them being the visit of His and Her Royal Highnesses the Duke and Duchess of York to our shores. Your Council, on behalf of the

Branch, presented them with an address of welcome, which we learned was greatly admired by them.

"The Ballarat and Launceston Branches have had a most successful year. Their numbers are steadily increasing, and they are doing an immense amount of good.

"In July last a new sub-Branch was founded in the Western District. Some 14 or 15 members have already joined, and the Branch promises to be a great success. Your Council takes this opportunity of congratulating the medical men in the Western District on their spirit, and to wish them all success in their endeavour.

"Turning to the work proper of the Association, many matters of importance have engaged the attention of your Council. First, regarding medical ethics. Several unfortunate cases of this nature have been considered during the year. The decisions which your Council saw fit to give have in all cases, we have learned, given satisfaction.

"A determined attempt was made by the proprietor of a so-called Drink Cure to sell the same to the Victorian Government for a large sum of money. The prompt action taken by your Council in the matter not only prevented this, but at the same time caused a Board of Investigation to be appointed. Although the Board is not all that might be desired, we are sure it will enter upon its duties fully resolved to investigate the matter thoroughly, and not be deceived by 'humbug.'

"The opinion of the various medical societies throughout the States is to be asked at the next Congress in Hobart regarding the advisability of forming an Australasian Medical Association. As you are aware, the Victorian Branch has resolved to give a full measure of support to so desirable an object.

"Last October a request was received from the medical men practising in Inverell, New South Wales, asking for the support of your Branch in the action they were taking against the clubs of the district. Your Council conveyed to them their sympathy, and at the same time resolved to do all in their power to assist them in their struggle.

"Coming to the internal affairs of the Association, we have great pleasure in informing you that the Branch is in a strong financial position, having close upon £200 to our credit. This desirable state of affairs is in a very large measure due to the great care exercised over the funds of the Association by your Hon. Treasurer. On the removal of the Austral Salon from their rooms, your Council made a most advantageous arrangement with the Architect's Society for the use of their premises for our meetings. These both, as regarding situation and convenience have given the greatest satisfaction. A large number of most interesting papers were read during the year. The attendance of members, however, was not as large as we should like to see. We well know that the time of medical men is fully occupied with professional duties; surely however, it is not asking too much from them to give only two hours once a month to the affairs of the Association. Your Council cannot close their report without referring to the valuable services rendered to the Branch by the retiring President, Dr. Neild. His time and advice have always been available to further the interests of the Association, and we trust he may be long spared to be a source of strength to the Council of the Victorian Branch. Your Council, in conclusion, trusts you will give to their successors the same measure of honest support as you have been pleased to accord to them during the year."

(Signed)

"J. E. NEILD, President."

"W. B. VANCE, Hon. Secretary."

Queensland.

A GENERAL meeting of the Branch was held on Friday, January 3rd, 1902, in the rooms, Treasury Buildings, the following members being present:—Dr. P. Bancroft (President), Drs. Hopkins, Taylor, Marks, Robertson, Wiold, Sutton, Hawkes, Culpin, Esple Dods, Eleanor Greenham, Flynn, Francis, Lockhart Gibson, Wilton Love, Halford, Connolly, Clowes and Brookway (Hon. Sec.).

Dr. HAWKES exhibited a uterus removed for fibroid, showing calcareous degeneration.

Dr. FLYNN exhibited a large body, which weighed 460 grains when fresh, passed per rectum by a patient who had suffered from gallstones for eighteen months, and who had been without symptoms for four months since its passage. The treatment of the case had been by olive oil.

The SECRETARY exhibited, for Mr. Rands, Government Geologist, specimens of edible clay from New Guinea, and read the following notes:—

NOTES ON CLAY EATEN AS A RELISH WITH FOOD BY THE NATIVES OF THE BETURA RIVER, BRITISH NEW GUINEA.

In the annual report on British New Guinea for the year 1899 to 1900, Mr. Robert Bruce, who resides at Gebaro Island, at the mouth of the Fly River, reports to His Excellency the Lieutenant Governor on this subject as follows:—

"I got a curious thing here this time. There was hanging from the roof what looked like a string of white sausages. I asked by signs for them and they were brought to me. I found they looked like pipe-clay, moulded, with a string running through their centre, which joined a lot together. After a lot of inquiries as to its use, I found that it was scraped down with a shell and used as relish to food. I tasted it, and fancied it contained arsenic. They gave me one, which, unfortunately was lost in the boat. Lots of the natives of Torres Straits and New Guinea eat red-fat earth, which contains iron. The women of the Straits eat it when pregnant so as to make the child light skinned, etc. This is the first time I have seen white clay eaten in New Guinea."

The Betura River is a tributary of the Fly River, and joins the latter on its southern side, opposite Canoe Island, between thirty and forty miles up from the mouth. It is situated towards the south-west of British New Guinea in latitude 8° 20' S., longitude, 148° 45'. The earth was analysed by the Government Analyst, and it proves to be practically a silicate of iron and alumina. The following is the analysis:—

Silica (SiO ₂)	...	...	62.0 per cent.
Iron and Alumina (Fe ₂ O ₃ , Al ₂ O ₃)	...	...	30.7 per cent.
Lime (Ca O)	...	...	Traces
Magnesia (MgO)	...	...	1.8 per cent.
Moisture at 100° C	...	...	2.4 per cent.
Loss at a dull red heat	...	...	4.3 per cent.

The clay evidently contains very little organic matter in its composition—under 2 per cent. The sample was specially tested for arsenic, but none was found. A sample of the so-called "red fat" earth forwarded to me consists of steatite, which is a hydrous silicate of magnesia.

The Secretary was instructed to thank Mr. Rands for the very interesting specimens and notes.

The SECRETARY announced the resignations of Drs. Comyn and Dixon, in consequence of these gentlemen having left the State.

It was proposed, in reply to a letter from the collector of the Queen Victoria Memorial Fund, that the Branch do not subscribe to the fund.

Dra. TAYLOR and SUTTON thought that a sum of five guineas should be subscribed by the Branch, and moved to that effect.

Dr. HOPKINS questioned the right of the Branch to devote its funds to any such object.

Dr. LOCKHART GIBSON thought that individual members might be deterred from subscribing privately if a subscription were sent from the Branch. He urged the importance of the fund, and stated that the medical profession was already very well represented in the subscription list.

Dr. WILTON LOVE considered that if any subscription were sent it should not be less than 25 guineas.

Dr. BROCKWAY thought it would be a good plan to collect private subscriptions from members, and to donate the sum thus collected as coming from the Branch.

It was resolved, after discussion, that a sum not exceeding £12 be devoted to the purchase of journals and periodicals for the library, provided that the journals were not removed from the room.

Dr. FRANCIS gave notice of motion to change the rules of the library to that effect.

The Curator of the library and museum (Dr. HAWKES) reported that seven journals had been promised by members of the Branch.

It was resolved that a sum not exceeding £10 be devoted to the purchase of necessary jars and material for the museum.

Dr. HAWKES suggested that a special effort should be made during the year to obtain specimens of intestinal parasites.

Dr. CULPIN introduced the subject of meeting in consultation the medical officers of the Brisbane Associated Friendly Societies' Medical Institute, and asked the Branch to endorse the resolution passed by the Queensland Medical Society in 1896, which was as follows: "That the Queensland Medical Society views with disfavour any of its members meeting the medical officers connected with the Brisbane Friendly Societies' Medical Institute in consultation, in view of the degrading conditions imposed upon their medical officers by this body." He said that he had asked the Secretary of the Brisbane Associated Friendly Societies' Medical Institute to supply him with a copy of the agreement between them and their medical officers, but had not been granted one, as the Secretary stated that a new agreement was in course of preparation, which would not contain the terms objected to by the profession.

Dr. TAYLOR pointed out the difference between the Brisbane Associated Friendly Societies' Medical Institute and that of Toowoomba, to the advantage of the latter. He thought that, if medical officers of the Medical Institute were not met in consultation—and he refused to meet them—they should not be met after they had left their service with the Institute, until some number of years had elapsed.

Dr. WILTON LOVE reviewed the circumstances of the foundation of the Institute, and stated that its formation had enabled the Friendly Societies to dictate terms to the medical profession, and that many Friendly Societies were seceding from "private" societies to the Institute. His chief objections to the Institute were (1) that the sum paid per member to its medical officers was less than that paid to medical officers of societies not connected with the Institute, (2) that no one was excluded from membership of the Institute, whatever his income or position. He said

that the officials of the Institute did not wish it to be known that their medical officers were not met in consultation by other members of the profession. He thought that to have been medical officer to the Institute was sufficient slur upon a man, and that further ostracism after he had severed his connection with the Institute was unnecessary.

Dr. CONNOLLY thought that some years should elapse before an ex-medical officer of the Institute was met in consultation by the profession, and that, in order to give every member of the Branch an opportunity of stating his views on the question before the Branch, the resolutions passed at the meeting should not be put into effect until they had been ratified at the next meeting; and was inclined to think that it might be wiser to defer any action until the new agreement spoken of by Dr. Culpin had been formulated by the Institute.

Dr. LOCKHART GIBSON agreed originally to the resolution of the Queensland Medical Society because of the degrading nature of the agreement, and thought that it might be wise to approach the Medical Institute in order to lay before them the views of the Branch. He thought that—(1) The agreement should be so framed that it could be signed without loss of dignity by any member of the profession; and that (2) there should be a wage limit; and that, if ostracism were decided upon, it should be carried out by every member of the Branch, and was personally of the opinion that a medical man should not agree to act upon the medical staff of a Hospital which had upon its staff a member of the profession who was in the habit of meeting in consultation medical officers connected with the Institute.

Dr. HOPKINS considered that the resolution passed by the Queensland Medical Society was not sufficiently stringent, in that no penalty attached to members who disregarded it. He emphatically thought that men who met the Institute men should themselves not be met. His great objection to the Institute was that money was being made by the Institute out of the work done by its medical officers, and he thought that there should be a time limit before an ex-medical officer of the Institute was met in consultation by other members of the profession, if, indeed, they should ever be so met.

Dr. SUTTON remarked that the objections to the Institute were (1) that the agreement was degrading, (2) the medical officers were exploited for the financial benefit of the Institute. He thought that the medical officers of the Institute should be ostracised by the profession, and this ostracism removed in each case only by a special resolution of the Branch.

Dr. HAWKES agreed with Dr. Hopkins, and related a similar condition of affairs as having existed in Rockhampton.

Dr. HALFORD thought that in fairness to the medical officers at present under agreement with the Institute a date should be fixed after which the resolution should take effect, in order that they might have an opportunity of severing their connection with the Institute if they wished to do so and if they were ignorant of the light in which their appointments were held by the profession.

Dr. BROCKWAY thought that it would be unwise to defer action until the Institute had framed a new agreement, but rather that it would be well to pass a stringent resolution and forward a copy of it to the officials of the Institute, since such pressure from the profession might produce real alterations in the present agreement. He cordially agreed with the suggestion that no ex-medical officer should be met in consultation

until a special resolution to that effect had been passed by the Branch. He suggested that whenever an advertisement calling for applications for the position of medical officer to the Institute appeared in the lay press, an advertisement setting forth the resolution of the Branch should also be published in order to acquaint intending applicants of the attitude of the profession towards the Institute.

After further discussion of a general nature it was unanimously resolved:—

1. That members of the Branch shall not meet in consultation the medical officers of the Brisbane Associated Friendly Societies' Medical Institute.

2. That members of the Branch shall not meet in consultation medical men who meet in consultation the medical officers of the Brisbane Associated Friendly Societies' Medical Institute.

3. That, except by a special resolution of the Branch at a meeting called for the purpose, the members of the Branch shall not meet in consultation medical men who now hold, or shall have held, the position of medical officer to the Brisbane Associated Friendly Societies' Medical Institute.

4. That resolution 3 shall also apply to medical men referred to in resolution 2.

5. That the foregoing resolutions be not put into effect until they have been ratified at the next general meeting (Friday, February 7th, 1902), and until each member of the Branch in Brisbane has been made acquainted with them.

6. That a printed copy of the foregoing resolutions be sent to every medical practitioner in Brisbane.

In consequence of the lateness of the hour it was decided not to read the paper on "Intussusception" contributed by Dr. Æneas McDonnell, Toowoomba, until the next meeting.

New South Wales.

THE regular monthly meeting of the Branch was held at the Royal Society's Room, on Friday, 20th December, 1901, Dr. Rennie, Vice-President, in the chair. There were also present Drs. Crago, Freyer, H. R. Nolan, Charles MacLaurin, Hinder, Sinclair Gillies, Gordon Craig, Doak, Bowker, Maitland, Burge, Mills, Binney, Sandes, Litchfield, Abbott, Pockley, Cleland, Herschel Harris, McDonagh, Sawkins, Dixon, G. A. Marshall, McMurray, McKay, E. S. Stokes, Corlette, Taylor Young, J. Morton, McLean, Bennet, Blackburn, MacPherson, Professor Anderson Stuart, the Hon. J. B. Nash.

Visitor: Dr. Kate Hogg.

The minutes of the previous meeting were read and confirmed.

The CHAIRMAN announced the election of Drs. Tilley and Clatworthy and the nomination of Drs. Kate Hogg, W. J. Durack, and Kelly.

Dr. HANKINS read "Notes on a Case of Thyrotomy and Evisceration of Larynx for Epithelioma." (See page 14.) The patient was examined by the members.

Professor STUART congratulated Dr. Hankins upon the simple contrivance made for the examination of the cases.

Mr. CRAGO said he also congratulated Mr. Hankins on his device for demonstrating the interior of the larynx to a second person, and he could go further than Professor Stuart and say that it was a success, as he had had an opportunity of viewing the larynx through it. He desired to congratulate Mr. Hankins on the case itself. He (Mr. Crago) had a few weeks previously assisted another surgeon at a similar

operation which had also done well. He thought it the only efficient way of removing intra-laryngeal growths.

The CHAIRMAN said he would ask Dr. Bowker to read his paper, and then the discussion on Dr. Hinder's paper, which had been postponed from last meeting could be taken with it.

Dr. BOWKER read a paper on "A Case of cholecysto-colostomy, with some remarks on the surgery of the bile ducts." (See page 8.)

Dr. HINDER read a summary of his paper on "Cases illustrating the surgical treatment of gall bladder and bile ducts." (See page 3.)

Dr. MAITLAND thought Dr. Bowker was to be congratulated on the success of his case. It was one which presented many difficulties, owing to the dense adhesions and matting together of the tissues. He had had the privilege of assisting him at the second operation. After listening to Dr. Bowker's remarks on the treatment of cholelithiasis, a branch of surgery in which he had had a large experience, there could be no doubt that he regarded the treatment of such conditions purely as surgical, and in this he was sure most of them would agree. Dr. Hinder had said that evening, and also in his paper which was read at the last meeting of the Association, that gall stone colic was always due to cholecystitis. This explanation of the colic given by Dr. Hinder was that given by Riedel and Kehr. Dr. Bowker, on the other hand, stated that the colic was due to the obstruction, and the efforts of the gall bladder to get rid of that obstruction. He would like to ask Dr. Bowker why he favoured the latter theory? He would like to ask Dr. Bowker another question, and it was this: Did he think the increased risk attached to the so-called "ideal" operation justified its being done, even if the conditions be favourable? The speaker's own experience was against it, but he would like to hear Dr. Bowker's opinion on the point.

Dr. MCKAY saw the profession was agreed upon the brilliancy of the operation described by Dr. Bowker. He remembered one case when he opened up he had found a considerable quantity of pus in the gall bladder. The patient had now a fistula, what was the best thing to do now, let the fistula remain, or operate with the chance of a peritonitis?

Dr. SINCLAIR GILLIES considered that in the majority of cases biliary colic was due to the attempted passage of a gall stone and not to catarrhal cholecystitis, though the latter sometimes produced mild attacks of colic. In favour of gall stones being the cause of the attack was their presence in the motions after an attack and the analogy to renal and vesical colic. If as Dr. Hinder held, biliary calculi were always secondary to septic infection and consequent catarrh of the gall bladder, and if biliary colic was due to cholecystitis and not to the calculi, how were the cases explained where after death calculi were found and no history existed of colic during life. Such cases formed from 7 to 20 per cent. of female *post mortems*. He asked Dr. Hinder what proof he had that in cases where cholecystitis was present at operations, the septic infection was not secondary to the irritation and blocking of the duct by the calculi as sometimes occurred in the renal and vesical calculus. He did not consider the position proved that catarrhal cholecystitis was always due to microbic infections. As regards medical treatment he considered the imbibing of large quantities of distilled water as the best solvent for calculi. Cold water enemata were often of use.

Dr. CHARLES MACLAURIN pointed out that the effect of morphia was not only to relieve the pain of gall-stones, but actually to cure the attack for the

time being. This seemed to him pretty conclusive evidence that the pain was not merely due to inflammation on which morphia would have no curative, but merely an anodyne effect; but was really due to muscular spasm, which the morphia would relax. Pain in biliary colic strongly resembled other pain found in hollow viscera; as for instance, the heat in certain aortic lesions, the uterus in parturition, etc. He saw no reason to postulate an inflammatory cause when a purely mechanical one seemed to suffice.

Dr. HINDER, in reply to Dr. Gillies, stated that it was the stone that caused the patient severe biliary colic. He advocated operation on the gall bladder whether there was stone there or not, to relieve any abnormal condition of that organ. As for the enemata of water, distilled or otherwise, he had not much faith in such treatment, owing to the time it would entail to get any effect. Dr. McKay's case had been treated in the best way under the circumstances. The speaker believed when there was stone in the gall bladder of duct to remove it at once. Dr. Bowker's was an extremely good case, admirably conducted.

Dr. BOWKER, in reply to Dr. Gillies, as to whether gall stones were the result of cholecystitis or occasioned cholecystitis. He had not stated that gall stones caused colic, or that cholecystitis caused colic; he said *obstruction* caused colic. The speaker did not think enemata of water would cause the gall bladder to contract. He considered that Dr. Hinder and he were both working from the same stand-point. A gall stone might be present in the bladder without causing much trouble.

Dr. SINCLAIR GILLIES read "Notes on a Case of Diaphragmatic Hernia." (See p. 11.)

Dr. SAWKINS referred to a case where rupture of the diaphragm, and consequent diaphragmatic hernia ensued as a result of external injuries, but without any fracture of the ribs.

Dr. BOWKER considered that Drs. Clubbe and Gillies were to be congratulated on the diagnosis of the case, seeing that according to statistics, only about five per cent. of cases of diaphragmatic hernia were diagnosed during life.

Dr. MILLS congratulated the authors on the diagnosis of their case. He remembered when he was House Surgeon at Prince Alfred Hospital admitting a man who had been crushed between a cart and a gate. He was collapsed and presented obscure symptoms, which were only explained at *post-mortem* examination as being due to diaphragmatic hernia.

Dr. SINCLAIR GILLIES considered Dr. Sawkins' case of great interest as showing the possibility of rupture of the diaphragm without injury to the ribs. He greatly regretted the enforced absence of Dr. Clubbe, to whom was due the greater part of whatever credit there was in the case.

A SPECIAL general meeting of the Branch was held at the Branch Offices, 121 Bathurst-street, Sydney, on Monday, 10th January, 1902. Present: Dr. G. E. Rennie (Vice-President) in the chair; Drs. W. G. Armstrong, Sinclair Gillies, Macpherson, Sydney Jones, Hankins, Arthur, J. M. Gill, Crago, West, Nolan, G. Hall, Pockley, Kirkland, Todd, Hinder, Mills, Abbott, G. A. Marshall, Read, Dixon, Worrall, Gledden, Bennett, Fiachi, Shand, J. A. Dick, Flynn, Kate Hogg. The minutes of the previous meeting were read and confirmed.

The CHAIRMAN announced the election of Dr. Kate Hogg and Dr. W. J. Durack.

Dr. RENNIE said the meeting had been called at the suggestion of their late President (Dr. Coutie), who had written from Victoria directing attention to the proposed Australian Medical Association, and suggesting that the New South Wales Branch should hold a meeting and institute a full discussion on the matter for the instruction of those members of the Branch who would attend the meeting of the Medical Congress at Hobart, so that the views of the members on the matter might be expressed at the Congress. Accordingly the Council had decided to call the meeting that night. He (the speaker) would move a resolution, and they would then have an opportunity of discussing it.

The General Secretary (Dr. Gregory Sprott) had communicated with the speaker, and stated that the time fixed for the discussion of this question was the last evening of the Congress. The discussion on cancer was to be held on the Tuesday and Friday evenings, then would be taken the proposed Australian Medical Association at the close of the discussion on cancer if time would allow, but it was quite possible that the question might not come on at all. The proposal, it had been intimated, had not received as much support as was expected, and it was not likely to be carried by a sufficient majority to make the scheme a success. The question had emanated from the Victorian Medical Society, the oldest society of the kind in Victoria. The Victorian Branch of the British Medical Association had never been so influential in that State as the older body, and there had always been a certain amount of antagonism between the two, and during the last year or two a great breach had occurred in the ranks of the Victorian Branch of the British Medical Association, which had tended to increase the influence of the Victorian Medical Society. It was this Society that had proposed instituting this Australian Medical Association, which was to be established on the same lines as the British Medical Association—to hold annual meetings, the Association to take charge of these Congresses instead of a shifting committee. In that connection, even in England, the annual meetings of the British Medical Association were controlled by local committees. He thought that most of them would agree that the suggestion to hold annual meetings instead of triennial ones would be a mistake, the latter being much more likely to be successful. Such a proposal would necessarily destroy the existing branches of the British Medical Association in all the different States. Personally, he could not see what advantage was to be gained by this proposal, rather a loss all round by such a procedure. It would be far better to work on with the existing Branches of British Medical Association in the different States, carrying on the work as in the past. He moved the resolution, "That the New South Wales Branch of the British Medical Association, after discussion, is of opinion that the proposal to form an Australian Medical Association is premature."

Dr. POCKLEY inquired how the matter came before the members.

Dr. RENNIE stated that the General Secretary of the Congress (Dr. Gregory Sprott) had sent round a circular letter, asking for an expression of opinion on the subject.

Mr. CRAGO seconded the resolution. He said the federation of the colonial or State Branches into an Australasian Branch, which should hold its annual meetings in the different capitals, was brought prominently before them by the late Dr. Huxtable. He (Mr. Crago) had discussed the matter with Dr. Lendon, of

Adelaide, who was a strong advocate of it, and had also talked it over with some members of the profession in Melbourne three years ago, but found it was not practicable then. He had also written to Dr. Rennie when he was in England, to ascertain what steps would be necessary to form an Australasian Branch. He (the speaker) was decidedly opposed to the starting of an Australasian Medical Association as opposed to the British Medical Association, and, if attending the Congress at Hobart, should do all in his power to prevent it. He (Mr. Crago) said that the Secretary of the Congress had definitely asked for an expression of opinion on the subject.

Dr. WEST wished to point out that the proposal emanated from the Victorian Medical Society, which was on unfriendly relations with the Victorian Branch of the British Medical Association; and the attempt appeared to be one to undermining the usefulness of the Branches.

Dr. ARTHUR said it seemed to him that the present discussion was premature. Nothing that the Congress could do would be binding on the Branches. It could only bring forward an abstract resolution, and postpone the matter for three years before anything could be done. He thought it useless to discuss the question before the meeting of Congress.

Dr. TODD was sorry to hear Dr. Arthur express the views he had. As a Branch of the British Medical Association they were bound loyally to oppose the movement.

Dr. POCKLEY proposed making the resolution firmer by striking out the word "premature," and substituting the word "undesirable."

Dr. T. STOBIE DIXON, as one of the founders of their Branch, would strongly oppose any proposal to start such an Association. They owed their strength to their connection with the parent Association in the old world, and in severing that connection they could but risk loss of strength. He regretted the paucity of members present, for it was needful that a vigorous expression of opinion against the proposal should be voiced in Hobart, and they must fight there and fight successfully rather than bring forward an abstract resolution to be transmitted to the Congress.

Dr. SYDNEY JONES considered that it was not quite fair to say that the proposed Association was a rival to the British Medical Association. He thought the proposal was to form an Australasian Medical Association, with Branches in the different States, as was now the case with the British Medical Association. He did not know that such was the fact, but considered it highly probable. He did not rise to support this proposal, for he regarded such a step as calamitous, and one that could but weaken the British Medical Association. He would do his best to oppose the proposal tooth and nail.

Dr. WEST said that as a great many of their members would not be able to go to Hobart it might be as well to get a document drawn up for signature by members, protesting against the proposal.

Dr. FIASCHI suggested obtaining the same end by a somewhat different method. He would have a vote taken of the whole of the profession before any steps were taken in the direction indicated by the Congress.

Dr. ARTHUR proposed as an amendment, "That the discussion be postponed for six months."

Dr. WORRALL hoped Dr. Arthur would withdraw his amendment. It was highly desirable that the original resolution should be carried at the meeting unanimously.

Dr. ARTHUR saw no reason for withdrawing his amendment. Nothing that the Congress could do

would be binding on them. As the amendment was not seconded it lapsed.

The resolution, as amended, was put to the meeting by the Chairman, and carried with one dissentient.

Mr. CRAGO proposed, "That it be a request to the members of the New South Wales Branch attending the Medical Congress to oppose the resolution for the establishment of the Australian Medical Association."

Seconded by Dr. WEST. Carried.

Dr. WORRALL proposed, "That the resolution be transmitted to the General Secretary of the Congress."

Seconded by Dr. MILLS, and carried unanimously.

COUNCIL MEETING.

THE Council met at the Editor's room on Friday evening, December 13th, at 8.30 o'clock. Present:—Drs. Foreman, Hankins, Crago, Rennie, Jamieson, Fiaschi, Brady, Newmarch, and Todd.

The minutes of the previous meeting were read and confirmed. Members elected—Dr. H. Clatworthy and Dr. Tilley.

A letter was read from Dr. Coutie with regard to the proposed Australian Medical Association. Resolved that a special general meeting of the branch be held on the January 10th for the purpose of discussing the question of the proposed Australian Medical Association before the congress in Hobart.

Letter from a member with reference to the employment of an unqualified assistant. To be informed that the General Medical Council considers such employment as infamous conduct in a professional respect.

Read letter from the Superintendent of the Australian Ambulance Association requesting to be furnished with names of members of the British Medical Association who would be willing to act on the staff of their hospital at Miller's Point. The reply of the Secretary, that he did not know of any members of the Branch who would be willing to accept the positions, was endorsed.

Credit balances:—General Account, £232 8s. 1d; and *Gazette* Account, £73 7s. 11d.

Accounts passed for payment:—Stamps, £2 18s. 1d.; refreshments, £2; stamps for Hon. Secretary, £1.

Dr. Rennie proposed that a hearty vote of thanks be accorded to Dr. Crago for having carried on the *Gazette* while the editorship was vacant. Carried unanimously.

REPORTS OF SOCIETIES.

SECOND ANNUAL MEETING OF SOUTH AUSTRALIAN MEDICAL DEFENCE ASSOCIATION.

THE second annual meeting of the South Australian Medical Defence Association was held at the Adelaide University on Thursday, December 5th, at 8.30 p.m.

Present: Dr. Swift (president) in the chair; Drs. Hayward, A. E. Wigg, Harrold, Cudmore, Benham, Jay, J. A. G. Hamilton, Todd, W. Anstey Giles, Marten, and Cavenagh Mainwaring.

Dr. TODD proposed, and Dr. MARTEN seconded, that the annual report be taken as read. (Carried.)

SECOND ANNUAL REPORT.

"GENTLEMEN,—The Council of the South Australian Medical Defence Association have much pleasure in presenting to you to-night their second annual report.

"They are glad to be able to say that the interest shown in the association during its first year of

existence has been very fairly maintained; for though, unfortunately, the number of our members has sunk from seventy-six to sixty-six, of which three are new members, still, death or absence from the colony accounts for seven of the deficiency, and of the remaining six they hope that some, at all events, will continue to be members.

"The death of the late Dr. Way is too recent and fresh in the memories of all of us to need any reminder of it, except to say that, great as was the loss to the profession and to society at large, still more does this Council miss one whose long experience of professional work, and whose sound judgment rendered his opinion on all matters concerning the welfare of the profession invaluable. Dr. Machlachlen, too, has gone from among us, and though perhaps not so well known to the city members of the association, his loss will be very much felt by his fellow-practitioners in the district in which he has been so long practising.

"The finances of the Association, of which you will receive a detailed account from the hon. treasurer, are in a sound position, and no great call has been made upon them during the year.

"Nine meetings of the Council have been held during the year, and many important questions have been considered at these meetings. An effort has been made

under the circumstances the Police Department should be responsible, and that in many other cases the services of a medical man are obtained by the police *gratis*, when a fee is justly due to them.

"The Council also wish to enter a protest against the avoidance of inquests in cases where the circumstances of the case seem to demand an enquiry, more especially in the country districts, but also occasionally in the city of Adelaide itself.

"The question of the appointment of unqualified medical men to be lodge surgeons, where qualified men are willing to give their services, is at present under the consideration of the Council.

"On several occasions the question of fees for examinations for life insurance has come before the Council, and they deem it wise to publicly announce that in their opinion the minimum fee for such examination should be £1 1s.

"In conclusion, the Council would like to see the members of the association take a more active interest in the proceedings by nominating candidates for office, and not allowing the work to be done by the same gentlemen year after year."

Dr. SWIFT moved the adoption of the report. Dr. TODD seconded, and, after some discussion, the motion was carried.

HON. TREASURER IN ACCOUNT WITH MEDICAL DEFENCE ASSOCIATION OF SOUTH AUSTRALIA.

Dr.	£	s.	d.
Cr. Balance in Savings Bank, Dec. 14th, 1900	73	3	11
Interest	2	18	10
Sixty-six (66) Subscriptions	69	6	0
	<u>£145</u>	<u>3</u>	<u>9</u>

Cr.	£	s.	d.
Scrymgeour & Sons, Stationery	1	5	6
Hon. Secretary, Stamps, &c.	1	19	0
Hon. Treasurer, " "	0	6	0
Exchange on Cheques	0	2	0
Balance in Savings Bank, November 21st...	<u>141</u>	<u>11</u>	<u>3</u>
	<u>£145</u>	<u>3</u>	<u>9</u>

W. T. HAYWARD, Hon. Treas.

Examined and found correct,

T. W. CORBIN.

Adelaide, November 21st, 1901.

to see if something could not be done to check the objectionable advertisements of Messrs. Freeman and Wallace that disfigure the city. An appeal to Sydney, their headquarters, was of no avail, and at present we are awaiting the results of a communication with Scotland, where Mr. Wallace received his diploma.

"An attempt has been made to assist Messrs. Sands and McDougall to compile a more accurate Medical Directory, but that firm did not consider the matter of sufficient interest to demand a reply to our communication, so at present things remain as before.

"The question whether members of the medical profession in actual practice should take shares in companies where their professional advice might make a considerable difference to the profits of such companies, was considered, and referred by the Council to the General Medical Council of England, who, however, in their reply threw the onus of deciding such questions on the individual practitioners themselves.

"A complaint has reached us that after, at the request of the local police office, a written report on a case had been sent to the coroner, a fee was refused. A reference to the Coroner's Acts shows that no communication is valid from that office unless signed by the coroner as coroner. The Council thinks, however, that

Dr. HAYWARD apologised for not notifying to the members that their subscriptions were due on January 1st, 1902. He then presented the treasurer's statement, which was adopted.

The following officers for the year 1902 were elected unopposed:—*President*, Dr. Swift; *Hon. Treasurer*, Dr. W. T. Hayward; *Hon. Secretary*, Dr. Cavenagh Mainwaring; *Committee*, Dr. A. E. Wigg, Dr. J. A. G. Hamilton, Dr. E. W. Morris, Dr. Henderson; *Auditor*, Dr. T. W. Corbin.

Dr. HAYWARD gave notice of proposal to alter rule regarding election of members to the Council at the next general meeting, viz., "That in future, three weeks notice of the annual meeting be given to members instead of one as at present, and that two weeks notice instead of three weeks be necessary for nominators of office-bearers; also, that two members of the Council should retire annually, and not be eligible for re-election, the first retirement to take place by ballot, and subsequently in rotation, each member serving two years in succession.

Dr. TODD proposed that in the opinion of this Association it was not *desirable* that its members should hold the position of honorary surgeon to racing and

other clubs that could afford to pay its officers a reasonable fee for their services.

After a lengthy discussion, in which most of the members took part, the following amendments were proposed:—

- (1) Proposed by Dr. MARTEN, and seconded by Dr. LONDON, "That the question be adjourned till a fuller meeting, and that the subject be placed on the *agenda* of that meeting."
- (2) Proposed by Dr. J. A. G. HAMILTON, seconded by Dr. W. ANSTEE GILES, "That the South Australian Medical Defence Association strongly disapproves of its members giving their services to racing clubs in an honorary capacity. The Association holds the opinion that such work should command proper payment."

First amendment put and negatived. Second amendment put and carried.

Dr. J. A. G. HAMILTON proposed, and Dr. HAYWARD seconded, "That notices of this motion be sent to the secretaries of the following clubs:—S. A. Jockey Club, Port Adelaide Racing Club, Adelaide Racing Club, Tattersall's Racing Club, Onkaparinga Racing Club, Hunt Club, and the S. A. League of Wheelmen." Carried.

Dr. JAY proposed, and Dr. HARROLD seconded: That the notice be also sent to the secretaries of the other Medical Defence Associations of Australia. (Carried.)

Dr. BENHAM brought forward the question whether Dr. Jürs had qualified himself according to the Medical Act to prefix the title of Dr. to his name. The subject was referred to the Council for consideration.

Dr. HARROLD raised the question of formulating a scale of fees, and the meeting requested the Council to consider the question.

OBITUARY.

**JOSEPH JOHN STAPLETON, M.D.
EDIN., M.R.C.S. ENG., WALLSEND, N.S.W.**

JOSEPH STAPLETON was born at Kilmore, Victoria, on the 18th June, 1855. His early education was received in his native town and in Melbourne. In 1877 he went to the University of Edinburgh, and graduated with second class honours in 1882. He returned to Australia towards the end of 1882, and settled at Honeysuckle Point and Lambton.

While a lad he was noted as a student, sure of success in work he attempted. His two ambitions were—as a medical practitioner to accomplish all the good that a sound professional knowledge would make him capable of; as a man of letters to have a full knowledge of Shakespeare's works.

During the year 1899 he travelled through the United States, and studied in New York and London. All his spare time was given to the study of Shakespeare's works in the library of the British Museum. In 1900 he returned to Wallsend, and succeeded Dr. J. B. Nash. He died suddenly on December 12th, 1901.

**MICHAEL JOSEPH CLUNE, F. ET L. MID.,
R.C.P., L.R.C.S. IREL., M.D. BRUX., SYDNEY.**

We regret to record the death of Dr. Michael J. Clune, which occurred on January 3rd, at his residence North Sydney, at the age of 54 years. Dr. Clune was a native of Sydney, and received his education

at St. Mary's College, Lyndhurst, and later at St. John's College. At the Sydney University he took his B.A. degree in 1863. Thence he went to the Dublin University, where he had a brilliant medical career. He returned to Sydney in 1872, and practised for many years in College Street. He was senior physician to St. Vincent's Hospital, with which institution he was closely associated for 20 years. Dr. Clune was also chief medical officer to the Citizen's Life Assurance Company, which position he held until about two years ago, when owing to failing health he was compelled to relinquish his post. It was about that period that he gave up practice. His name was prominently before the public in connection with the first outbreak of small-pox in Sydney. He attended and reported to the authorities the first case, and with his patient was transferred to the Quarantine Station at North Head, where he spent an enforced period of isolation. As a medical man, his advice was frequently sought by young practitioners, and it was readily given. Dr. Clune paid a visit to Europe after his release from quarantine, but soon after his return he was attacked with typhoid fever, which left behind it a disease of the spinal cord, and this eventually resulted in his death. He leaves a widow and one daughter.

D. L. Macdonald, M.B., C.M. et L.M. Edin., died at Rockhampton, Q., on December 22nd, 1901.

Geo. Harward Brown, M.B. Ch.B. Melb., late of Derby, W.A., died at Melbourne last November

The death is announced of Alexander Stewart Paterson, M.D. Edin., of Carrington Street, Adelaide, on January 6th, at the age of 65 years. We shall publish an obituary notice in a future issue.

Charles Ferdinand Eichler, M.D., M.R.C.S., L.R.C.P., L.S.A.L., late of Bridge Street, Sydney. Died on January 10, 1902, aged 81 years.

Poisoning by Charcoal Fumes.—A dress-maker who resided by herself in Annandale, and had occupied the house for the past four years, died from poisoning by charcoal fumes. On entering the room a constable found the remains of deceased lying on the bed in a decomposed state. Her feet were resting on the floor, while her head was hanging over the other side of the bed. Beneath her head were two kerosene tins filled with half-burnt charcoal. A bag containing charcoal and a small pair of tongs and a fire shovel were also lying beside them. An examination of the room showed that all the cracks in the windows and doors had been sealed up with pieces of rag, making the room almost airtight. In the room were found several letters which deceased had written, and one referred to some money and concluded with the words, "Good-bye; good-bye, eternally." The City Coroner conducted an inquest, when a finding of suicide was returned.

TRAINED MALE NURSE seeks engagement in mental or ordinary medical cases. Has had considerable experience in mental nursing, massage, etc., and is accustomed to travelling with patients to Europe and in the Australasian States. Unexceptional testimonials. References kindly permitted to Drs. F. N. Manning, Jarvie Hood, W. E. Warren, T. S. Dixon.

Address: B. T. O'NEILL,

68 Crown Street,

Nr. William St.

(Late 17 Leicester St., Sydney.)

Telephone No. 166 William Street.

REVIEW OF CURRENT MEDICAL LITERATURE.

GYNÆCOLOGY AND OBSTETRICS.

Radical Treatment of Carcinoma of the Uterus.

This was the chief subject discussed at the Ninth Congress of the German Gynecological Society at Giessen, May 29th to 31st, 1901, more especially with regard to the ultimate results. Freund, Winter, Küstner, Leopold, Mackenrodt, Olshausen, Wertheim, and many others took part in the debate. Some favoured the abdominal, others the vaginal method of operation, and in this connection the conversion of Wertheim from the vaginal to the abdominal route is worthy of note. Three years ago there was no greater advocate for vaginal hysterectomy. Winter summarises the discussion by urging instruction of physicians and midwives as the best means of securing early operations by prompt diagnosis of uterine cancer. None of the present methods absolutely exclude the possibility of recurrence from implantation of cancer cells. It cannot yet be decided whether the abdominal or the vaginal operation is preferable. Until this has been done Winter would prefer the vaginal route for cases in which the growth is confined to the uterus, the abdominal if the parametrium is involved.

Inoculation of Carcinoma.

R. Schaeffer (*Zeit. für Geb. u. Gyn., Bd. xlv., H.3*) records what is apparently an instance of this occurrence. The patient had had both ovaries removed four and a half years before for adenocarcinoma of those organs. For one and a half years the woman had observed a gradually but constantly increasing hard lump in the abdominal scar. At operation this growth was found to be entirely extraperitoneal, in the anterior abdominal wall. No evidences of new growths were found in the peritoneum or in the region of the former operation. Microscopic examination showed the tumour in the scar to be an adeno-carcinoma, apparently the result of inoculation of the abdominal wound with a fragment of the ovarian tumour during the first operation.

Primary Tuberculous Pyosalpinx.

Macnaughton-Jones (*The Medical Press*, October 30th, 1901) reports a case of this nature, in a young woman otherwise in perfect health and without any hereditary history of tuberculous disease. The patient, aged 22, had been married for two and a half years, at the time of operation, and had completed her first pregnancy at the end of the first year of her married life. She complained of considerable and constant pain in the left side, with inability to walk, and dyspareunia. Catamenia regular and normal. On examination the left adnexa were found much enlarged, softened, and very sensitive. On operation the fallopian tube was found distended with pus forming a long crescentic swelling an inch and a half in diameter at its widest part, the surface of the tube being adherent. The right ovary, though fixed by some adhesions was healthy. Mr. Targett examined the specimen and gave the following report:—"The external surface of the specimen is covered with thin fibrous adhesions in which many miliary tubercles are embedded. The lumen of the tube is filled with thick

caseous pus, and the inner surface is shaggy from ulceration of the mucous membrane. There is very little thickening of the wall of the tube anywhere, and in some parts it is much thinned by distention and ulceration. Microscopic sections of the undilated uterine end of the tube exhibit general thickening of the mucous membrane and infiltration with miliary tubercles. The epithelial lining is for the most part intact."

Operative Treatment of Purulent Collections in the Appendages.

L. Mandl and O. Bürger (*Arch. für Gyn., Bd. lxxv., H.1.*), contribute a very exhaustive paper on this subject, basing their conclusions on the results obtained in Professor Schauta's clinic, Vienna. They are of opinion that the vaginal route is preferable in most cases. Double salpingo-oophorectomy (abdominal route) for bilateral disease has been discarded as giving unsatisfactory results, while exposing to the dangers of laparotomy. Unilateral abdominal extirpation is permissible only where it is certain that the appendages of the other side are in normal condition. Abdominal radical operation is suitable only in case the vaginal route cannot be employed. Radical operation through the vagina is the method of choice for bilateral suppuration, or for unilateral suppurative disease with chronic inflammatory changes in the adnexa of the other side. It gives the best immediate and permanent results. Vaginal extirpation of suppurating appendages of one side is confined to cases in which puncture has shown that the pus is not virulent, and in which the other tube and ovary are normal. Vaginal incision is rarely used, as its permanent results are unsatisfactory. Abdominal incision is applicable to certain cases in which the purulent collection is easily evacuated by opening the abdominal wall.

Retroversion of the Uterus.

I. Clarence Webster (*Jour. Am. Med. Assoc.*, October 5, 1901), when operating for this condition, opens the abdomen, frees and brings forward the uterus. A small hole is then made through the broad ligament on one side under the utero-ovarian ligament near the uterus. Through it a pair of forceps is passed from behind, in order to grasp the round ligament about an inch from its uterine end. It is pulled through the broad ligament in a double fold. It is carried across the posterior surface of the uterus a short distance above the utero-sacral ligaments, and is stitched in this position with chromic catgut. A similar procedure is done on the opposite side. Each ligament is stitched to the hole in the broad ligament. He claims there is no possibility of any interference with pregnancy and labour, and that the normal range of uterine movements is not materially altered.

The Prevention of Post-operative Adhesions

G. Gray Ward, junior (*American Journal Obstetrics*, June, 1901) says the formation of adhesions after operation is directly proportionate to the amount of sepsis, traumatism, dry air contact, loss of heat and raw surface there is present. The mass ligature should be abandoned, the vessels in the pedicle tied individually, and the raw surface covered by suturing the peritoneum over it. The time element is of the utmost importance. Everything that will shorten the time of exposure of the peritoneal cavity to air contact should be employed. Moist and not dry asepsis must be used. One of the most important measures for the prevention of intestinal obstruction from adhesions is the replace-

ment of the loops of intestine and the omentum in their proper relations. It is the adhesion of a loop of intestine in an abnormal position that is the cause of obstruction. The abdominal cavity should, in every case, be filled with hot salt solution before the incision is closed. This floats the intestines and allows them to adjust themselves to their normal relations. Active peristalsis must be produced early by drugs. Free motion of the bowels after a laparotomy is undoubtedly a preventive of adhesions. The patient should be encouraged to change her position in bed frequently.

Hernia after Abdominal Section.

A. Gibson (*Canada Pract*, September, 1901) reports the case of a rupture of the abdominal wall at the cicatrix of a section done *ten years* previously. The patient was at stool, and while pressing on the abdomen to facilitate the passage of fæces, the abdominal wall gave way at the cicatrix and the intestine protruded. There was considerable bleeding and the patient died in fifteen hours.

A Case of Pregnancy with Ovarian Cyst.

Fothergill (*Obst. Trans. Edinburgh*, 1900-01) gives the history and treatment adopted in the case of a patient *æt.* 35, 3-para. On July 6, 1899 she consulted him about an abdominal swelling first noticed six months previously and which had grown steadily in size. The family history was also interesting, her mother, *æt.* 61, and a sister *æt.* 35 both died, without operation, of ovarian tumours. Health improving, good pregnancies, labour, and lactation normal each time. Menstrual function always normal. Last period April, 1899. Apart from amenorrhœa, no symptom of pregnancy. Inspection of the abdomen revealed a swelling the size of an eight month pregnant uterus, occupying a central position. Complete dulness on percussion, fluctuation was pronounced, palpation above the umbilicus detected a solid body, suggesting a foetal limb; while in the hypogastrium a solid mass was felt which resembled in size and shape a foetal head. Auscultation negative in result. Percussion with the patient in various positions proved there was no free fluid in the abdomen. Per vaginam the cervix was felt high up soft and large. The body of the uterus could not be distinguished from lower part of the abdominal tumour which could be felt through the fornices, and appeared to be solid on the right but cystic on the left side. Pregnancy could not be excluded although amenorrhœa was the only symptom, and softening of the cervix the only sign. Diagnosis made was a cystic tumour with pregnancy of between two and three months' duration. Operation was advised and she went home to consult her doctor. July 26th she fainted suddenly and was revived with difficulty. Examination showed that the bulk of the tumour had disappeared. July 30th: Began to pass blood and clots freely per vaginam. On August 10th her condition was: high temperature, still bleeding, discharge very foul, abdomen flat, hypogastrium and right flank dull. Palpation revealed the fundus uteri half way up to the umbilicus, while the dull area to the right of it was solid to the touch. Per vaginam the uterus was large and flabby, and occupied the middle line, the os admitted a finger tip, and an ill-defined solid mass was felt on the right corresponding to the dull area of the abdomen. The uterus was about this time emptied of placental debris and blood clot. The temperature continued unsatisfactory. On September 5th the physical signs were just as on July 1st, except that the cervix was small and firm. Operation was decided upon. Following the examination on Septem-

ber 5th, she became very ill, pulse 140, temperature 102°. Constant vomiting and on September 9th, she appeared to be dying of acute peritonitis. The abdomen was distended with fluid, the temperature falling, and the pulse getting quicker and quicker. Operation was immediately decided upon. On opening the abdomen a large quantity of slightly purulent fluid escaped. The cyst was tapped (contents clear) and delivered; adhesions few and recent. No attempt was made to remove the peritonitic fluid which remained in the abdominal cavity after removal of the cyst. Not a sponge or swab was introduced into abdominal cavity during the operation. No attempt at drainage was made, the wound being closed and sealed with collodion at once. Recovery was uneventful, and she has remained perfectly well up to the present date.

The case presents several features of interest. Diagnosis was not easy, and the subsequent history did not at first sight tend to confirm it. However, it seems that the sequence of events was somewhat as follows:—The growth of the cyst was favoured by the gestation which began in April. Enlargement of the uterus ruptured the cyst (July 26th), causing syncope and disappearance of the abdominal swelling. Rupture of the cyst caused abortion, which was incomplete. This caused bleeding, and permitted septic infection of the uterus, which was relieved by treatment. Pus, however, was left in the right fallopian tube, for the temperature remained irregular. The examination on 5th September was followed by peritonitis, because of manipulations squeezing pus from the tube into the peritoneal cavity. This view was confirmed during operation, when, on dividing the pedicle, pus flowed from the cut end of the tube.

The writer concludes by giving the following reasons for neither attempting any peritoneal toilette nor using drainage:—(1.) Extreme condition on 9th September was due not so much to septic intoxication as to mechanical disturbance, due to the cyst and the free fluid in the abdomen. (2.) She had already been in a thoroughly septic condition for at least a month, and her power of dealing with the septic poison was therefore good. (3.) If she died after the operation, it would be of shock, not of sepsis. Shock was, therefore, avoided in every way, and treated, not by intravenous, subcutaneous, or intra-peritoneal injection of saline fluid, but by leaving in the abdominal cavity a large quantity of its own secretion, the peritonitic fluid.

Albuminuric Retinitis and Uræmic Amaurosis in Pregnancy.

E. W. Clap (*Bost. Med. and Surg. Jour.*, July 11th, 1901) in a paper on the above subject, states that both conditions are rare in pregnancy. Albuminuric retinitis is a disease accompanied by immediate visible changes in the eyes. It may occur at any time, but especially during the first two months. It is apt to recur in successive pregnancies, though not necessarily. Blindness is almost never caused by the first attack, but each does some damage. Uræmic amaurosis is a disorder of the visual apparatus not accompanied by immediate visible changes, although it may finally lead to atrophy. It usually occurs late in pregnancy. It apparently never destroys sight by its first attack. In albuminuric retinitis occurring early, abortion should be considered if the retinitis is of a severe type. The treatment of both conditions is the treatment of the albuminuria and the non-use of the eyes.

OPHTHALMOLOGY.

The Nature of Acute Glaucoma.

In the *Annales d'Oculistique* for July, Terson compares acute primary glaucoma to the acute idiopathic oedema which occurs in various other organs, but especially in the lungs. He points out the similarity of the mode of production. A diffuse toxic condition is present over the whole body, and this may be either a general infection, such as influenza, erysipelas, etc., or some diathesis as gout or rheumatism. He instances the usual association of hypermetropia with this form of glaucoma, and points out that the occurrence of acute primary glaucoma in several successive generations may be explained by the hereditary transmission of hypermetropia. With these two predisposing causes he attributes the exciting cause of the local hypersecretion—which constitutes the condition of acute primary glaucoma—to some temporary nervous or emotional excitement, and thus explains the special occurrence of the disease in neuro-arthritic subjects. [This is analogous to Von Graefe's theory of an acute serous choroiditis.] Terson refers to some of the theories that have been put forward from time to time to explain the exact mechanism of the process by which this serous exudation and local oedema is brought about, but leaves the question open for discussion. As to prophylaxis and treatment the writer urges special attention to the general health, and treatment of the existing predisposition or diathesis. The only positive cure is by the performance of an early scleral iridectomy.

Serous Iritis not a Disease *per se*.

In a lengthy paper in Knapp's *Archives* for November, Bruns goes fully into the vexed question of the nature of serous iritis, keratitis punctata, or descemetitis, and claims to show that, as a distinct disease, it does not exist. In this he is in the main in agreement with Fuchs, but he points out that the writers of nearly all the text books perpetuate the error of describing it as a pathological entity. Bruns' conclusions are briefly:—(1.) There is no such disease as serous iritis; (2.) Keratitis punctata is a disease which is an accompaniment of *plastic* uveitis (iritis, cyclitis, or choroiditis), and never occurs independently, though the presence of slight degrees of uveitis may be overlooked. He thinks that more exact observation will show descemetitis to be most frequently the principal symptom of an acute outbreak of plastic choroiditis.

The Primary Intracranial Tumours of the Optic Nerve (Fibromatosis Nervi Optici).

This is the title of an admirable and exhaustive monograph of over 80 pages from the "Studies from the Royal Victoria Hospital, Montreal," creditable alike to the hospital and to the author, W. G. M. Beyers. The author gives particulars of two cases that had come under his notice, and deals exhaustively with the whole subject. He discusses fully the pathology, symptoms, diagnosis, prognosis, and treatment, and gives an analytical table of all the recorded cases collected from the original papers, and also a complete bibliography. The paper is practically a resumé of all the work done in the subject. Extra dural tumours are not included. The writer maintains that in spite of confusion, arising from diversity of terminology, the tumours are essentially mesoblastic in origin, containing several phases of developing connective tissue, and no nerve elements proper. He gives the name of fibromatosis to the condition. With regard to etiology he remarks that the number of cases reported to have followed some febrile disturbance or infectious disease

is too great to be merely accidental. The distinguishing signs are (1) painless, slowly developing exophthalmos; (2) profound and early reduction in vision; (3) a palpable tumour in the position of the optic nerve, non-adherent to the orbital wall; (4) relatively good movements of the globe; and (5) hypermetropia, due to pressure on the posterior surface of the globe. The prognosis is serious, not from recurrence in its strict sense, but from the continued development of the intra-cranial portion of the tumour, which it is impossible to remove by operation. Twelve instances are recorded where signs of an intra-cranial neoplasm occurred after operation, and only eight cases are positively shown to have continued in good health beyond five years. As to treatment, Krönlein's operation is the only one recommended. It had been done five times in all for this condition. [A description of this operation will be found in the October number of the *A.M.G.*] Knapp's operation was performed in 20 cases, in nine of which the results were distinctly bad, resulting in phthisis bulbi, or necessitating enucleation of the globe, while in only four cases could the after results be considered entirely satisfactory from a cosmetic point of view (the sight being of course destroyed in every case by either Krönlein's or Knapp's operations). The remaining tumours of the total of 102 were only got after enucleation or discovered on the *post mortem* table.

A Plea for the Occasional Performance of Couching of Cataract.

At the last meeting of the B.M.A. at Cheltenham Mr. Henry Power read a paper on this subject, urging the propriety of doing this operation in certain cases, such as those of very old and feeble people, where a wound would be likely to heal badly; cases where there is intractable conjunctivitis or mucocoele; in deaf persons, lunatics, imbeciles, epileptics, or bleeders; in cases of tremulous iris with fluid vitreous; or those who had already lost one eye from an unsuccessful extraction. He maintained that the risks of the operation had been much exaggerated. In the discussion that followed there was a general agreement with the author's contention.

At the same meeting Mr. Hartridge reviewed some of the more recently introduced preparations of silver used in ophthalmic work. Protargol was the most efficient. Darier also read a paper in which he regarded protargol as better than silver nitrate for purulent ophthalmia it being safer, and having more penetrating power. He had given up silver nitrate in these cases, using protargol instead, in strength up to 30 per cent.

The Treatment of Anisometropia.

In Knapp's *Archives* for November Dr. Douane, of New York, describes his practice (which differs from the usual one) of giving each eye its correction in anisometropia, and states (quoting numerous cases) that he gets good results almost invariably. If this be so the work of the refractionist is simplified, and he is spared considerable perplexity in the treatment of these cases. In his tabulated results he records cases in which the two eyes differed by 2, 4, 6, and even 11 dioptres with varying degrees of astigmatism, in which the patients bore full correction of each eye, and *get perfect binocular vision*. He refers also to the well known fact that it is not always the cases of high anisometropia that give rise to trouble when corrected. Temporary discomfort may ensue in some cases, but this disappears in a week or two provided the patient perseveres steadily with the glasses.

NEUROLOGY.

Regeneration of the Spinal Cord.

Under this head two investigators, Bielschowsky and Fickler (*Neurologisches Centralblatt* 1901, No. 16.) discuss the possibility of a regeneration of nerve bundles after severe compression of the spinal cord. Working independently they have both found nerve fibres passing down in the pia mater of the anterior median sulcus of the cord. These fibres appear to connect up segments above the lesion with those below it. Fickler found in his cases a certain amount of improvement which he ascribes to the re-establishment of the motor conducting path by means of these new fibres. There appears to be evidence that such fibres are present normally, but Fickler asserts that after such lesions as mentioned above more fibres develop.

An article by Rudolf Kolster (*Deutsche Zeitschrift für Neuroheilkunde*, Bd. xx, Heft. 1-2, p. 16) helps to support the idea that cell division takes place even in the human central nervous system. It has long been known that a centrosome is frequently found in the protoplasm of a nerve cell, but Kolster, by treating the cells of the ventral horn of gray matter with a solution of ammonia, and later with sulphuric acid, gets rid of the tigroid bodies, which have hitherto been a great hindrance to a clear view of the centrosome being obtained. He then stains the tissue with iron-hæmatoxylin, and in many cases is successful in finding one or two cells containing a centrosome in the section. The idea that the centrosome is an expression of over-nutrition of the cell appears to be negated by the fact that Kolster has found these bodies in patients dying from pernicious anæmia.

Daniel McCarthy, Philadelphia (*Neurolog. Centralblatt*, Nov. 17, 1901) points out the presence normally of a reflex through the fifth and seventh cranial nerves. By tapping the supraorbital nerve with a percussion hammer fibrillary twitching of the orbicularis palpebrarum is set up. He gives instances in which owing to interruption of the reflex path through the fifth and seventh, the reflex was wanting.

Adler (*Deutsche Med. Wochenschrift*, 1901, Nov. 8) suggests, as the result of experimental research and clinical observation, that the cerebellum exerts an inhibitory influence over reflex tone, and that the symptom picture of multiple sclerosis is dependent on an interruption of the descending cerebellar tract.

Professor E. A. Homén (*Deutsche Zeitschrift für Neuroheilkunde*, Baud. xx, Heft 1-2, p. 24), gives the results of some investigations on Schultze's comma tract in the dorsal white columns. He comes to the conclusion that his tract represents the descending divisions of the dorsal roots as they enter the cord. The article is illustrated and shows the tract occupying the inner part of Burdach's column stretching from a point near the dorsal white commissure nearly to the periphery. The degeneration could be followed downwards for two or three segments.

The Gasserian Ganglion.

To those surgeons interested in the method of removing this ganglion a work by R. Caminiti, termed "Recherches sur l'Anatomie Chirurgicale du Ganglion de Gasser," would probably be interesting. The work includes

detailed information on the position, shape, color, consistence, weight, and size of the ganglion. Much attention is paid to the surrounding topography. The author states that his book is the result of careful investigations made in the *post-mortem* room on fifty-two bodies. The work is illustrated.

Migraine.

(*Ueber Migräne von Dr. Alen Spitzer* (Fischer, Iena.) Dr. Alen Spitzer of Vienna in his recent book on migraine introduces many arguments on behalf of a theory that the trouble is due to a vasomotor disturbance producing a partial blocking of the foramen of Monro by the swollen choroid plexuses. He explains the sensory aura as being due to a distention of the ventricles producing pressure on the cortex and explains the pain as due to similar pressure on the dura mater.

Dr. Wilhelm Stekel (*Migräne and Wärmebildung von Dr. W. Stekel*, *Wiener Med. Wochenschrift* 1900, 52-54), has observed a fall of temperature in the axilla in migraine, whilst the rectal temperature remained normal. He finds that an increased production of heat by fast walking, or cycling, etc., has a good effect, whereas warm baths have a bad effect.

Whitehead's article on the treatment of migraine by seton as recommended by him in the *British Medical Journal* February, 1901, is reviewed in the *Neurologisches Centralblatt*.

The Mental Functions of the Brain.

After Flecksig published his valuable work on the cerebral cortex, in which he pointed out he could distinguish about forty areas whose fibres myelinated at different times, and after the suggestion which he made, that these different areas were, perhaps, connected with different functions, it is not surprising and somewhat gratifying to find that an attempt has already been made to trace out such a connection. Dr. Bernard Hollander, has just published a work under the above title, in which he adduces much evidence for the theory that the various forms of mental disease affect not the cortex as a whole, but only localised parts of the same. Such a theory can only be tested by closely and accurately observing and recording the intellectual and emotional conditions of a large number of cases, both normal and abnormal, and at the same time making similarly careful head measurements, to be followed as often as possible by an investigation of the condition, shape, mass, course, etc., of the convolutions, the camera being brought into requisition at almost every step. The work should prove especially interesting to those engaged in the study of the insane, and who thus have excellent opportunities of making such clinical investigations as are indicated above.

Professor Cunningham, President of the Anthropological Section said at the recent meeting of the British Association at Glasgow in speaking of the psychic centres: "But the areas of cerebral cortex to which man owes his intellectual superiority are now roughly mapped out, and the time has come when the effect produced on the cranial form by the marked extension of these areas in the human brain should be noted, and the skulls of different races contrasted from this point of view. To some this may seem a return to the old doctrine of phrenology, and to a certain extent it is; but it would be a phrenology based upon an entirely new foundation and elaborated out of entirely new material."

CORRESPONDENCE.

WEST AUSTRALIA.

(FROM OUR SPECIAL CORRESPONDENT.)

MUCH activity has been displayed during the past few months in the medical world of this State. In Fremantle, an attempt is being made to form a Medical Institute, which is to include all the members of the existing Friendly Societies. The medical men in Fremantle, assisted by many of us in Perth, have taken active measures in strenuously opposing this up-to-date method of sweating the medical profession, and not only has every applicant received a printed memorandum dealing with the medical aspect of this Medical Aid Institution, but most of the members of the Friendly Societies themselves have received a printed memorandum stating the case from their point of view. Should any medical practitioner accept the position, his life will certainly not be a "bed of roses."

During the past month the "West Australian Medical Defence Union" has been incorporated, and we are at present seeking to obtain as members most, if not all, of our fraternity in this State. I feel sure that much benefit will be derived both directly and indirectly by the presence, amongst us, of this much-needed organisation. We are at present far too content to allow both our personal and collective interests to remain in the background, instead of attempting to raise the tone and standard of the profession, not only amongst ourselves, but also in its relationship to the general public.

The Medical Board has conducted three prosecutions under the "Medical Act" against chemists who have overstepped the line which should separate his conduct from that of a medical man. Perth and other towns in this State are overburdened with chemists, some of whom style themselves "Consulting Chemists," and they, with others, examine, diagnose, and prescribe for their customers in flagrant contravention of the "Medical Act." All cases of this kind which come to the knowledge of the Board will be actively proceeded against in the local courts. Unfortunately, not much help can be expected from the Pharmaceutical Council, since some of its members are in active sympathy with such irregular practices. A number of letters have appeared in the local newspapers since the last case was tried and a conviction obtained, but their value is to some extent discounted by their having been written by interested parties, at least in some instances.

The West Australian Branch of the British Medical Association is increasing in strength and importance rapidly. A very successful dinner was held at the Hotel Esplanade, Perth, early in November, at which about 24 members were present. Dr. Davy, the president for 1902, was in the chair, and G. Leake, Esq., K.C., M.L.A., the late Premier of this State, was the principal visitor. We hope to have an increasingly successful session in 1902, and many of us desire that the Intercolonial Medical Congress should be held in Perth in 1905. It would give the much needed stimulus, which we, like all young Societies, need, especially when in a sparsely scattered community.

The political world of this State during the past few months has been chaotic, and medical legislation, like all other legislation, has been remarkable for its absence. An attempt was made by Friendly Societies to pass a Bill amending their former Act. This amending Act made it impossible for any medical club to be formed unless it was incorporated under the provisions of the "Friendly Societies Act." This pernicious amendment would have given these bodies an increasing power, and would have pressed hardly upon many medical practitioners, who derive a considerable part of their income from clubs formed under other than Friendly Societies' rules. I am happy to state that we are now sufficiently "on our guard," and sufficiently powerful to be able to prevent any such Bill from becoming law.

In conclusion, let me ask all my professional brethren, who are considering the advisability of settling in this State, to make firstly, due and very careful inquiries as to the *bonâ-fide* nature of the position they are asked to accept, and if in any doubt as to the genuineness of the billet, to write to me since so many specious advertisements proceed from local hospitals and associations in this State.

"A TRUE HERO OF MEDICINE."

(To the Editor of the Australasian Medical Gazette.)
SIR,—Might I be permitted to call attention to the case of "A True Hero of Medicine," the facts of which are recorded in the *British Medical Journal* of December 7th, p. 1709. I feel certain many of the profession would like to show their practical sympathy by subscribing to the fund which is being raised to assist the widow and children of the late Dr. Smyth, who have been left destitute. Personally, I should be very pleased to forward my quota, and would suggest that a subscription list be opened in your columns. Yours, etc.,

R. W. YOUNG.

Milton, January 8th, 1902.

[We shall be pleased to receive any contributions towards this object.—ED. A.M.G.]

PUBLIC HEALTH.

New South Wales.

Precautions against Importation of Small-Pox.—In view of the extension of the small-pox epidemic in London, the Board of Health has directed that all vessels from British ports shall be subjected to medical inspection prior to being granted pratique at Sydney.

Penalties for the Sale of Diseased Cattle.—Two cattle dealers recently prosecuted at the instance of the Board of Health were fined, one £40 and the other £20, for selling diseased cattle contrary to the provisions of the Diseased Animals and Meat Act.

Bubonic Plague in Sydney.—No case of bubonic plague has occurred in Sydney since December 11th, 1901, and no plague infected rats have been found since November 26th, 1901. Since the last mentioned date 479 rats have been examined in the microbiological laboratory of the Department of Public Health, all being free from any signs of plague.

Rat Destruction in Sydney.—At the last meeting of the Board of Health it was reported that 15,006 rats had been burnt at the board's furnace, between dates November 28th, 1901, and January 6th, 1902. In addition, large (but uncounted) numbers of rats had been killed during the fumigation of vessels and sewers.

Victoria.

Vital Statistics, Melbourne.—During the month of November, 1901, the estimated population of Melbourne and suburbs was 494,368. The number of births was 962, a proportion of 23.68 per 1000, being 150 below the average of the month during the previous 10 years, or 213 below it, if allowance be made for the increase of the population. The deaths number 525, being at the rate of 12.92 per 1000. This was 96 below the average of November during the previous 10 years, or 131 below it allowing for the increase of population. 25 deaths were due to malignant disease, 68 to phthisis, 15 to other forms of tuberculosis, 69 to disease of the circulatory system, 50 to diseases of the respiratory system, 48 to diseases of the digestive system, and 37 to disease of the urinary system. The deaths of infants under twelve months numbered 85, as compared with 120 in November, 1900. The rate of infantile mortality was 88 per 1,000 births registered in the month under review, as compared with 117 in November, 1900; 174 in November, 1899; 208 in November, 1898; 134 in November, 1897; 160 in November, 1896; 127 in November, 1895; 115 in November, 1894; 147 in November, 1893; 112 in November, 1892; and 183 in November, 1891. In striking contrast to the decline in the percentage of deaths of children under five years, the proportion of deaths of elderly persons—aged 75 and upwards—has shown a marked increase in the last ten years, proving infallibly that the percentage of elderly persons in the population has considerably increased, and has apparently not yet reached a maximum. This point is of considerable interest as bearing on the question of old-age pensions. The actual numbers of aged persons cannot be ascertained until the results of the recent census have been fully tabulated.

Diphtheria in Ballarat.—Owing to the appearance of diphtheria in the municipality of Ballarat (Vic.),

the Public Works department has arranged to have the whole of the State schools in Ballarat West fumigated during the Christmas and New Year vacation, in accordance with the request from the board of advice.

Vital Statistics, Ballarat.—During the month of November, 1901, 137 births, and 64 deaths were registered. 31 of these were due to local diseases; 10 to cancer and phthisis; 10 to developmental diseases; and 7 to specific febrile diseases. There were no deaths from typhoid fever.

Inspection of Dairies.—The officers appointed by the Agricultural Department to inspect the dairies of the State have reported that the system of inspection adopted by the municipalities is almost valueless, and at their suggestion the Health department has been urged by Mr. Morrissey to enforce the appointment of municipal inspectors, with a sufficiently limited area to enable them to carry out their duties efficiently. The chairman of the Board of Public Health (Dr. Gresswell) states that the regulations concerning dairies are very explicit, and confer abundant powers on the municipal authorities, whose duty it is to see them carried out. The Government has decided on the preparation of a measure dealing with dairies which will give additional powers, and the board is concerned with the question as to the direction in which the existing law should be amended.

Queensland.

Vital Statistics, Brisbane.—During the month of October, 147 births were registered in the registration district of Brisbane, being 8 less than in the preceding month, and 31 less than in the corresponding month of last year. 82 deaths were registered, being seven more than in the preceding month, and four less than in the corresponding month of last year. The total number of deaths in Brisbane and suburbs was 119; 65 of these were due to local diseases, 22 to specific febrile diseases, of which one was due to plague, 8 to typhoid fever, and 2 to dengue fever; 15 were due to constitutional diseases, of which 6 were due to cancer and 6 to tuberculosis. The true infantile mortality, or deaths under one year, as compared to births in the district, is seen to have been 11.11 per cent. within, and 50.00 per cent. outside the municipality of Brisbane. The total rate for city and suburbs being 12.20.

Tasmania.

The Central Board of Health.—At a meeting of the Central Board of Health held last month, a letter was read from Mrs. R. S. Bright, gratefully acknowledging the letter sent to her offering the board's sympathy on the death of her husband, Dr. R. S. Bright. The Secretary (Mr. A. Mault) reported that a tender for the construction of the works at Barnes Bay Quarantine Station had been accepted by the Public Works Department, and the work would now be done. The necessary intermediate building between the hospital and the outside would be put up. Persons would change their clothes in the intermediate building on entering and leaving. Additions would be made to the hospital accommodation, and repairs effected to the caretaker's cottage. The amount of tender was £250. A letter was read from the Town Clerk of Hobart, stating that the City Council had accepted a tender for the conveyance of the night-soil from the city to Triffitt's Point, Glenorchy. Dr. Crouch moved that the Board refuse its sanction to the deposit of nightsoil at Triffitt's Point, and the motion was carried.

Vital Statistics, Tasmania.—During the month of November 109 births—54 males and 55 females—were registered in the registration districts of Hobart and Launceston, an increase of 22 as compared with the corresponding month of last year, and a decrease of 3·2 as compared with the average of the births registered in November during the last five-yearly period. The deaths numbered 72—38 males and 34 females—28 of which took place in public institutions. Death was attributed to old age in 18, to diseases of the circulatory system in 9, to phthisis in 7, and to typhoid fever in 1. During the month of November there were 53 deaths registered in the district of Hobart, but one of these was not a resident of the district. In the city there were 33—males 20, females 13—giving a death rate equal to 16·08 per 1,000 per annum. The principal causes of death were typhoid fever 1, influenza 1, phthisis 4, cancer 1, old age 7, premature birth 2, heart disease 2, disease of liver 2, and the remainder were of a general nature.

South Australia.

Central Board of Health.—A meeting of the Central Board of Health was held at the offices, Victoria Square, on Wednesday, December 18th. In reply to a communication from the secretary to the Local Board for Lacedpede, the secretary was instructed to say that the Health Act gives no power to officers of health to prohibit, for a given period, nurses who have attended puerperal fever patients from engaging in midwifery services.

Mr. L. Lewis, officer of health for Angas, wrote calling attention to the unusual prevalence of coughs and mild cases of bronchitis among children in the district, and suggesting the closing of the public school.

The inspector of food and drugs returned correspondence with a supplementary report on beer, also a report regarding legislation with reference to wine adulteration.

The infectious disease returns showed .—6 cases of typhoid fever at Dulwich, 3 at Port Adelaide, 2 at Adelaide and Wallaroo, and 1 at each of the following places :—Prospect, Greenhill-road, Victoria Park, Glen Osmond, Norwood, Glenelg, Narracoorte, and Unley-road. 8 cases of pulmonary tuberculosis at Parkside, 2 at Adelaide, and 1 at each of the following places :—St. Peters, Hahndorf, Olare, Hamilton, Bowden, Millicent North, Pekina, Springton, Clarence Park, and South Kilkerran. 2 cases of diphtheria at Norwood, and 1 at Menindie ; 1 case of erysipelas at Campbelltown, and 1 at Clarence Park.

The infectious disease mortuary returns showed 1 death from pulmonary tuberculosis at each of the following places :—Port Wakefield, Reynella, Strathalbyn, Gaversham, East Moonta, Adelaide Hospital, Carrington-street, Glanville, Glenelg, Parkside, Mocatta-place, and Goodwood.

At a meeting on December 27th, the Board approved of the appointment of Dr. Guy P. U. Prior as officer of health for the district of Penola, *vice* Dr. A. A. Johnston, resigned.

The infectious disease returns showed 3 cases of typhoid fever at Dulwich, 2 at Port Adelaide, 3 at Kapunda, and 1 at each of the following places :—Adelaide, Bowden, Norwood, Parkside, Victoria Park, East Moonta, Hamley Mines, Moonta Mines, Gawler South, and Mount Crawford. 4 cases of diphtheria at Nackara, and 1 case at each of the following places :—Adelaide, Medindie, Norwood, Victoria Park, near Redruth, Thomas Plains, New Parkside, and Parkside. 2 cases of pulmonary tuberculosis at Adelaide, and 1

case at each of the following places :—Southwark, Goodwood, Norwood, Gawler, Yelta, Port Adelaide, and Walkerville. 1 case of scarlatina at Adelaide ; 1 case of erysipelas at Blyth ; and 1 case of puerperal septicæmia at Glenelg.

The infectious disease mortuary returns showed 1 death from pulmonary tuberculosis at each of the following places :—Port Wakefield, George Court, off Wright-street, Flinders-street, Gawler South, Port Adelaide, Goodwood, and Mile-End ; 1 death from puerperal eclampsia at Giles' Corner ; and 2 deaths from typhoid fever at Dulwich.

East Torrens County Board of Health.

At a meeting of the East Torrens County Board, on December 18th, Dr. Shepherd, the officer of health, reported that during the fortnight 12 cases of infectious disease had been notified, viz., two typhoid at Norwood and seven at Dulwich, one case each of diphtheria at Norwood and Payneham, and a case of erysipelas at Campbelltown. Referring to the cases at Dulwich, he had inspected the vicinity, and found some insanitary conditions, and in one house, where five of the cases occurred, he considered it was overcrowded, as four of the patients slept in the same room. The matter had been referred to the local board, and had been attended to. The trained nurse reported having visited and inspected all the notified cases, eight of which had been removed to the Adelaide Hospital. Five were members of one family, two of whom had died. All the other cases were fairly isolated at home and under observation. Disinfection had been completed in five houses after removal or recovery.

Vital Statistics.—In South Australia exclusive of the Northern Territory, during the month of October, 1901, the population was 357,390. The births numbered 784, equal to '219 per cent. The deaths numbered 273, equal to 0·76 per cent. The death rate was lower than any for the last five years, except that for 1897, when it was '072 per cent. In the city of Adelaide during the month of October, there were 71 births, equal to '181 per cent, and 62 deaths equal to a rate of '158 per cent. Death was due to diseases of the circulatory system in 18, to phthisis in 7, and cancer in 4 cases.

Report of the Medical Officer of Health for Adelaide, Dr. T. Borthwick, for the year ending September 30th, 1901.

(Abstract).

Population.—The revised Census returns show the population of the City to be 39,240 on the 1st April. It was estimated by the Registrar-General to be 41,220 on the 1st January of this year, and the estimate for that date, which is taken as the basis of the various rates in this report, is now corrected to 39,193. It is thus evident that the population of the City has been overstated in recent years.

Births and Deaths.—There were registered during the year ending 30th September, 958 births and 853 deaths. The birth-rate and death-rate per thousand amount to 24·41 and 21·76 respectively. The death-rate includes all deaths registered within the City bounds ; but if we exclude the deaths in public institutions of persons not usually resident in the City, it reduces the number of deaths to 655, the death-rate is represented by 16·71.

Infant Mortality.—Of the 655 deaths registered during the year 138 were under one year of age. This represents a mortality of 14·4 per 100 births, as against 13·4 for the last year, and 17·2 for the previous year. The infant mortality is highest in the December and March quarters.

Cause of Deaths.—Taking the zymotic diseases, it is noteworthy that there is a decrease this year in the deaths from measles and diphtheria, while there is an increase in the deaths from enteric fever, whooping cough, and diarrhoeal diseases. The phthisis mortality is 1·70, and the total tubercular mortality 2·08 per 1,000.

Summary.—We have a lower general death rate, which is somewhat discounted by a lower birth-rate, and also a fairly low infant mortality.

Infectious Diseases.—Compulsory notification came into force on 18th January, 1899.

Typhoid.—139 cases were reported, of which 73 were imported from outside districts. This leaves 66 cases which apparently had their origin in the city, as compared with 27 last year. Fifteen can be accounted for as having derived infection from existing cases in five houses. In the remaining 51 cases, the premises were mostly in a sanitary condition. The cases were not common to any milk supply, and the only circumstances common to all of them were the sewer system, the water supply, and the dust-laden atmosphere. There was no reason to suspect the sewer system in any case except in one instance. The water supply of the City comes chiefly from Happy Valley and Hope Valley reservoirs, and it is well known that the water-sheds are largely populated, that efficient inspection of the water-sheds is not carried out, and that there is no provision made for filtration of the water. Thus there are opportunities for contamination of the water supply. In regard to the dust laden atmosphere, certainly if the dust contains typhoid bacilli it may be the cause of outbreaks of typhoid fever. For instance, if infected dust gets into the domestic pantry, the bacilli will find suitable media, such as milk, on which they can grow, and the result of the consumption of this milk would in all probability be typhoid fever in the consumer. Another possible carrier of infection is the common house-fly. It may have been regaling itself on typhoid stools or other infected matter, and shortly after having transferred its attention to the milk or other food in the domestic pantry. This risk can only be obviated by rendering the whole house, or at least the pantry, fly-proof.

Diphtheria.—85 cases were reported, of which 55 were imported for hospital treatment. This leaves 30 cases of apparently local origin to be accounted for, as compared with 54 last year. Five of these probably were infected from the original patient in the house, a second case having occurred in one house, and a third in two houses while the first patient was ill or convalescing. The remaining 25 cases were not traced to any special source.

Scarlet Fever.—This disease has been more or less prevalent throughout the year, although never assuming epidemic proportions. Thirty-two cases were reported, of which 6 were imported for hospital treatment. This leaves 26 cases of apparently local origin, as against 56 last year.

There were 23 and 1 cases reported of erysipelas and puerperal fever respectively, as against 14 and 2 last year.

Pulmonary Tuberculosis.—130 cases were reported during the year, of which 14 were imported for hospital treatment. This leaves 116 of apparently local origin as against 72 last year. The increase is probably due to more complete notification. A large number of the houses in which the disease occurred were insanitary; the conditions noted being want of ventilation and want of light in rooms, dampness of walls, and dirty walls and ceilings. Sixty-seven houses were finally disinfected and cleansed during the year after this

disease; of which 54 were houses where patients had died, and 13 were houses which had been otherwise vacated by patients.

In regard to inspection of meat and milk supplies the necessity for this lies in the well-known fact that cattle are frequently affected by this disease. Inspector Morris has been appointed to take charge of the milk supply of the city, and a large portion of the suburban area, and he has done good work in regard to the city dairies. A central public abattoir is also essential to the efficient inspection of meat, and the scheme which is in hand should be pushed on.

SUGGESTION IN RELATION TO INFECTIOUS DISEASES.

1. **Hospital Accommodation.**—It is essential that a purely infectious disease hospital should be provided, and the Local Boards should have considerable if not complete control over its administration.

2. **A Steam Disinfecter.**—Hitherto, disinfection has been carried on as efficiently as is possible without a steam disinfecter, but absolute disinfection of bulky articles, can only be ensured by means of a steam disinfecting apparatus.

3. **Bacteriological Diagnosis.**—A Bacteriological examination is absolutely essential in many instances to establish a definite diagnosis of certain infectious diseases, such as diphtheria, typhoid fever, pulmonary tuberculosis. It would undoubtedly be in the interest of public health if the Local Board made an arrangement whereby all doubtful cases of the above-mentioned diseases be examined at the Elder Bacteriological Laboratory, free of cost to the medical practitioner, of course through the Medical Officer of Health.

4. **Public Abattoirs.**—In order to control tubercular disease efficient inspection of meat is necessary, and this can only be secured by the erection of public abattoirs. This should be proceeded with at as early a date as possible. Notwithstanding Koch's recent dictum, it is generally recognised that it would be a retrograde and unwise action to neglect this precaution while the matter is still *sub judice*.

During the present year 127 houses were condemned as unfit for human habitation, of which 90 were ordered to be demolished, the remainder being renovated to the satisfaction of the Board. In addition 426 notices were issued to have houses cleansed, ventilated, and repaired, and 24 houses were attended to after the occurrence of infectious diseases in them.

The question of providing public lavatories with their accessories is one which must be dealt with soon. The available accommodation at present exists only at the railway stations and at restaurants, and these are necessarily limited. During the year complaints have been received of the insanitary condition of some of these places, and enquiry has shown that it arises chiefly from an overtax on the accommodation provided.

The general result of the year's work has been to increase the claim of Adelaide to rank as a sanitary city; it must be evident to anyone who has occasion to visit the poorer parts of the town, that there has been a distinct advance, during the present year, in the general sanitation, and this must be ascribed to the systematic and effective work of the inspectors and trained nurse.

New Zealand.

Vital Statistics.—In Auckland and Suburbs there were registered 120 births, and 67 deaths. In Wellington and suburbs, 100 births and 40 deaths. In Christchurch and suburbs 99 births and 30

deaths. In Dunedin and suburbs, 106 births and 62 deaths. The death-rates per 1,000 of population in Auckland and suburbs was 1.84; in Wellington and suburbs, 0.81; in Christchurch and suburbs, 0.67; in Dunedin and suburbs, 1.18. Influenza caused 4 deaths at Auckland and suburbs in November, and at Dunedin 2 deaths. Against these 6 deaths for last month at the four centres there were 14 in October, 34 in September, 21 in August, and 18 in July, resulting from the above-named complaint. 21 deaths were from phthisis, 5 from other tubercular diseases, and 15 from cancer. 101 deaths were to local diseases, or 50.75 per cent. of the whole. Deaths from nervous diseases numbered 29, including 10 from apoplexy, and 8 from paralysis. There were 17 deaths from diseases of the circulatory system, including 13 from heart disease. Of 28 deaths from diseases of the respiratory system, 15 were from pneumonia.

UNIVERSITY INTELLIGENCE.

University of Sydney.

EXAMINATION RESULTS.

FACULTY OF MEDICINE.

Fifth Year Examination.

Honors at graduation as M.B. and Ch.M.—Class II: E. C. G. Page, D. Wallace, B.A., A. Muscio.

Passed with credit in the subjects of the fifth year examination—E. W. Moncrieff, E. C. G. Page, P. L. Broadbent, O. S. Flecker, and D. Wallace, B.A., *æq.*; A. Muscio and W. A. R. Sharp, B.A., *æq.*

Passed—T. Ambrose, H. M. Anderson, B.A., E. W. A. Combes, W. H. Horton, W. A. Hunter, W. Seldon, E. H. M. Stephen, F. S. Stuckey, Edith Ure, F. W. Webb, Margaret I. White.

Fourth Year Examination.

(Operative Surgery and Surgical Anatomy and Pathology).

Passed with credit—P. L. Hipsley, St. J. W. Dansey, F. M. Suckling, J. S. Davis, and R. E. Woolnough, *æq.*; S. A. Smith, P. N. Aitken, Eleanor E. Bourne and T. W. Mason (3) *æq.*

Passed: F. C. Adams, H. C. R. Bell, H. P. Blayney, L. W. Bond, A. J. Corfe, A. Curtis, E. B. L. Fitzpatrick, H. E. Fox, C. Latham, H. S. Marsh, E. L. Newman, J. K. Osborne, M. J. Plomley, L. J. Robertson, H. F. Sadler, J. M. Thompson, J. F. Walton, J. F. Watson, R. Waugh.

Third Year Examination.

(Anatomy, Physiology, and Materia Medica and Therapeutics).

Passed with credit—G. A. Buchanan, C. S. Browne, G. G. Sharp (3) *æq.*; W. Mawson, T. P. Conolly, T. E. C. Higgins.

Passed: V. Benjafield, J. Buchanan, T. B. Clouston, Constance E. D'Arcy, A. E. Finckh, F. W. A. Finselbach, B. S. Goodsell, H. O. Lethbridge, J. M. M'Encroe, W. C. Mansfield, A. B. Phillips, Sarah L. Ure, M. M. Vernon.

The John Harris Scholarship for Anatomy and Physiology has been awarded to G. A. Buchanan.

Second Year Examination.

(Anatomy, Physiology, and Organic Chemistry).

Passed: E. A. R. Bligh, J. Coen, E. Culpin, P. Dalton, H. L. Deck, K. Hammond, E. S. Harrison, J.

R. Leslie, V. M'Dowall, J. L. M'Kelvey, Susannah H. O'Reilly, J. W. Power, W. T. Quaife, A. S. C. Roberts, C. Shellshear, P. E. Smith, F. G. M. Simpson, A. Verge, G. H. Vernon, R. J. N. Whiteman, E. H. Young.

Passed with credit in Anatomy and Physiology—Susannah H. O'Reilly, W. T. Quaife, J. W. Power, R. J. N. Whiteman, E. S. Harrison, J. R. Leslie, C. Shellshear.

First Year Examination.

The following have passed—Jessie A. Aspinall, G. Bell, A. C. Cahill, B. J. Fitzpatrick, B.A., D. H. Graham, S. H. Harris, G. H. S. Lightoller, E. H. Molesworth, T. L. O'Reilly, C. R. Palmer, H. W. Palmer, R. A. Parker, T. C. Parkinson, C. P. Sapsford, J. B. St. V. Welch, E. A. Wherrett, C. St. I. Willis.

Class lists in individual subjects—*Chemistry*—*Honors*—Class I. T. C. Parkinson. Class II. G. H. S. Lightoller, R. A. Parker, E. A. Wherrett.

Physics—*Honors*—Class I. T. C. Parkinson. Class II. (alphabetical). G. H. S. Lightoller, H. T. C. MacCulloch, E. H. Molesworth, T. L. O'Reilly, C. R. Palmer, H. W. Palmer, R. A. Parker, E. A. Wherrett.

Biology—*Honors*—Class II. H. T. C. MacCulloch, E. A. Wherrett, Jessie A. A. Aspinall.

Remwick Scholarship—T. C. Parkinson.

Professor Haswell's Prize for Zoology—C. R. Palmer.

Professor Haswell's Prize for Laboratory Notes—Constance E. Binney, D. D. Gibson, D. H. Graham, three *æq.*

INFORMATION has been received by the University authorities from the Agent-General for New South Wales, that an Instructor in Mechanical Dentistry has been selected through the assistance of Dr. Cunningham, of the London Institute of Dental Technology. He will enter upon his duties in connection with the Sydney Dental School on the 1st March next. The Dental Hospital has now been opened for the reception of patients, and a considerable number have availed themselves of its facilities.

University of Melbourne.

SUPPLEMENTARY PASS EXAMINATION.

DECEMBER, 1901.

First Year Medicine.

G. W. Barker, D. Buchanan, J. Iver M'I. Chirnside, S. H. Cooke, F. H. Looney, J. I. Parer, Florence E. I. Smith, H. B. W. Smith, Hannah Thompson.

Second Year Medicine.

A. L. B. Best, G. W. Foster, Ada I. V. Griffiths, C. Harcourt (Q.C.), H. L. Schultze, W. C. B. Turner, H. H. Vogler, L. Weir, A. S. Young.

Third Year Medicine.

Hilda M. Hart, R. A. M'Lennan (O.C.), D. Mendelsohn, E. Robertson (T.C.), J. E. Streeter, W. E. Tulloh (O.C.), W. D. Yuille.

Fourth Year Medicine.

H. T. Hamilton, B. G. Healy, H. A. C. Irving, M. E. Lynch (O.C.), J. A. A. Rail (Q.C.), R. M. Sutherland.

Fifth Year Medicine.

J. Bennett, P. A. Bona (Q.C.), Frances Snow, Effie Stillwell, W. G. H. Tregear.

An offer made by Mr. Fred Bird, M.B., Victoria, to provide a scholarship to the value of £60 in the medical school for 1902, has been gratefully accepted by the University Council.

University of Adelaide.

At the annual commemoration the Elder Hall was crowded shortly after 2 o'clock on Wednesday afternoon, December 18th. An hour was spent in enjoying the travesty presented by the students. The real proceedings commenced at 3 o'clock on the arrival of His Excellency the Governor, Lord Tennyson, who was accompanied by Lady Tennyson, Lord Richard Nevill, Capt. Fielden, and Mdlle. Dussau. The vice-regal party were accommodated with seats just below the dais. The Speaker of the House of Representatives, Representative Holder, and Mrs. Holder (whose daughter took the degree of M.A.), sat just behind Lord and Lady Tennyson.

The Dean of the Faculty of Medicine, Dr. Lendon, presented—

The Dr. Davies-Thomas Scholar:—*Robert May* (student in medicine of the fourth year).

The Winners of the Elder Prizes:—*Robert Douglas Brummitt* and *Walter Henry Russell*, equal (students in medicine of the first year), and *Alfred Hinton Burnard* and *Phoebe Chapple* equal (students in medicine of the second year).

The undermentioned graduates of other universities were admitted *ad eundem gradum*:—*Frederick Benham*, M.D., University of London; *Arthur Henry Gault*, M.D., University of London; *Edward Angus Johnson*, M.D., University of Gottingen; *Elizabeth Kleanor Weld*, M.B., University of Melbourne; *Frank Magarev*, M.B., University of Sydney; *Sydney Manon Verco*, M.B., University of Sydney; *James Frederick Harris*, M.B., University of Melbourne; *Henry George Chapman*, M.B., University of Melbourne (*in absentia*).

HOSPITAL INTELLIGENCE.

The Adelaide Hospital New Medical Superintendent.—Mr. Bronte Smeaton, M.R.C.S., L.R.C.P., has been appointed by Executive Council to be medical superintendent of the Adelaide Hospital, *vice* Dr. Astles. Dr. Smeaton was educated at Prince Alfred College, and took his medical degree at the Adelaide University with first-class honours. He afterwards proceeded to London, and was admitted as a member of the Royal College of Surgeons. After spending some time in one of the principal London hospitals as house surgeon he returned to South Australia about a year ago, and began private practice at Murray Bridge.

On December 25th the committee and staff of the Children's Hospital, Adelaide, made a presentation to Mr. Walter Howchin, who is retiring from the secretarial chair, after having occupied it for 16 years. The Chief Justice, on behalf of the committee, presented him with a silver tea and coffee set, and Dr. Lendon, representing the past and present staff, handed him a set of spoons and sugar tongs. The new secretary, the Rev. Dr. Burgess, is already making himself acquainted with the duties of the office.

Women's Hospital, Melbourne.—The funds of the hospital have benefitted to the extent of £85 as the result of the citizens' concerts and direct donations from the Mayor (Sir Samuel Gillott, M.L.A.). The vacancy on the medical staff of the midwifery department, caused by the resignation of Dr. Elvins, has

been filled by the appointment of Dr. J. S. Yule. A sum of £509 2s. 9d. has been received as the hospital proportion of the Hospital Sunday collections. Janet Lady Clarke has been appointed to represent the hospital at the next meeting of the newly formed Association for the Prevention and Cure of Tuberculosis.

Children's Hospital, Melbourne.—The foundation stone of an addition to the Children's Hospital, to be known as the Princess May Pavilion, was laid by His Excellency the Governor on the afternoon of December 20th. The new building will contain 40 beds, providing accommodation for the indoor treatment of 520 more patients. Its cost will be £10,000, and Mr. Edward Miller, M.L.C. explained that the committee had ample funds for the work. His Excellency was presented by Mr. R. Murray Smith with a suitably inscribed silver trowel, the gift of an anonymous donor, as a souvenir of the first function of the kind at which he was called upon to officiate as Governor of the State, and Lady Clarke received a handsome bouquet from the President, Mrs. A. Austin.

Christmas Gift to the Children's Hospital, Sydney.—Alderman Watkins of Waverley, has forwarded a cheque for £11 12s. to the secretary of the Children's Hospital, being proceeds of a bazaar held at Carisbrook Waverley, on December 15th last. The bazaar was arranged for a number of young children, all of whom are under 15 years of age.

New North Sydney Hospital.—The Premier has intimated that an additional sum of £10,000 would be placed upon the next Estimates towards the cost of erecting the new hospital buildings for the northern suburbs.

Walcha Hospital.—Owing to the crowded state of the hospital it was found necessary to erect a large marquee. Typhoid is prevalent. The medical officer is improving slowly.

Wagga Hospital has been granted £300 by the Government.

Hobart Hospital.—At the last meeting of the Board of Management of the Hobart General Hospital the report of the Medical Committee was adopted as follows:—In accordance with the resolution of the Board of Management, the Medical Committee has considered the request made by the Pharmaceutical Society of Tasmania, that it is desirable in future appointments to the position of dispenser at the Hobart Hospital, the practice of the other States should be followed, which is, that only fully qualified chemists be appointed. The latter was dealt with at a meeting held on the 10th instant, when it was resolved:—“That the Medical Committee recognises the importance of having a fully qualified chemist at the hospital, who shall be responsible for the accurate dispensing of all medicines, etc., and recommends in the filling up of future vacancies for the position of dispenser, that only fully qualified chemists be employed.” There were two applications for the position of assistant house surgeon and dispenser for the hospital. The board appointed Dr. J. Leonard Pinchin to the vacant position. Dr. E. L. Crowther asked what was being done with regard to a Contagious Diseases Hospital? The Chairman said that if urgent necessity for one arose, a special meeting of the board would be called. He hoped the Medical Committee would soon be able to submit some inexpensive proposal to the board.

Launceston Hospital.—His Excellency the Governor, Sir Arthur Havelock, on the occasion of his

recent visit to Launceston, was shown over the hospital. Before leaving, His Excellency made the following entry in the visitors' book:—"An admirable institution; perfectly equipped, and satisfactory in all respects."

Dr. Whitton, surgeon to the Reefton Hospital, N.Z., in his last monthly report, is advocating some big reforms, amongst them the abolition of superintendent and dispenser, and that the position be filled with an up-to-date matron with a knowledge of dispensing.

MILITARY INTELLIGENCE.

WESTERN AUSTRALIA.

Western Australian Military Forces (Medical Staff).—Captain John Mitchell Young Stewart, to be Surgeon-Major.

NEW SOUTH WALES.

New South Wales Army Medical Corps (Partially Paid Establishment).—Lieutenant Alfred Herbert Horsfall, transferred from the Volunteer Establishment. *Volunteer Establishment.*—Neville Reginald Howse, V.C., L.B.C.P., late Captain Army Medical Corps Unit, on service in South Africa, to be Lieutenant, to date from 17th January, 1900; Captain Sidney Henry Schrader has resigned his Commission; also Lieutenant Gerald Septimus Samuelson.

NEW ZEALAND.

New Zealand Volunteer Medical Staff.—Charles Henry Wheeler to be Surgeon-Captain; William Crawford MacKnight to be Surgeon-Captain; Surgeon-Captain William Bey, (attached to the Greytown Rifle Volunteers) to be Surgeon-Major of the 5th Battalion, Wellington Rifle Volunteers; Edward Auster Bewes to be Surgeon-Captain; Maui Pomare to be Surgeon-Captain; Edward Henry Alexander to be Surgeon-Captain; Surgeon-Captain Thomas Radford King has resigned his Commission.

THE LATE SURGEON-CAPTAIN HOPKINS.

A memorial tablet of brass has been fixed in a panel of the dado on the eastern wall of the Elder Hall, Adelaide, and close to the front of the platform. The tablet bears the following inscription:—"In the South African campaign, in the year 1900, William Fleming Hopkins, Bachelor of Arts of the University of Adelaide; Bachelor of Medicine and of Surgery of the University of Melbourne; Surgeon-Captain in the Australian Regiment, under fire, and at imminent risk of his life, tended and rescued comrades wounded and in danger. He died on 27th March, 1900, at Naauwpoort, of fever contracted while performing his duty. His parent University erects this tablet to commemorate her first graduate who died in active service for Queen and Empire."

MEDICO-LEGAL.

Breach of the New Zealand Medical Registration Act.—Daniel Vinsen Dossetor, whose diplomas were only relative to permissions to vend drugs and carry on the business of a chemist in Tasmania, the diplomas being under the seal of the Hobart branch of the Tasmanian Pharmacy Board, was charged under the name of De Vinson Dossetor with an alleged breach of the Medical Registration Act in describing

himself as a specialist in men's and women's special diseases. The charge was laid on the information of the police, with having at various times during October, in Wellington, N.Z., falsely and wilfully pretended to be a medical doctor, and, further, with having procured a person or persons unknown to circulate printed matter of an indecent character. After hearing evidence for the prosecution, and counsel for the defence, the accused was fined £10 and costs.

An advertising medical specialist, known as Madame Lever, was arrested at Perth on December 29th, charged with supplying drugs to a young woman for an illegal purpose.

Peculiar Herbalist Case.—An action was heard at the Warrnambool court recently (says the Melbourne Age), when "Professor" Walker, carrying on the practice of a herbalist, sought to recover the sum of £45 from a farmer named John Norris, who had consulted him. The evidence showed that the defendant, who said he was under the impression that the "professor" was a legally qualified medical practitioner, undertook to pay him £100 for certain curative treatment, the arrangement being that defendant should pay a deposit of £50, and the remaining £50 when cured. Defendant accordingly gave the complainant a cheque for £50. A few hours later, however, defendant discovered that the "professor" had no legal qualifications, and applied for a refund of the £50. Complainant declined to comply with the request. The defence was one of illegality of contract and false representations to the defendant, inasmuch as complainant was not a duly qualified medical practitioner. After a lengthy hearing, Mr. M'Cormick, P.M. held that people who thought fit to go to men not properly qualified and make contracts with them must suffer the consequences. The whole of the evidence went to show that defendant must have known complainant was not a legally qualified practitioner. An order would, therefore, be made for the amount claimed, with £3 8s. costs. Execution was stayed for fourteen days.

Medico-Legal Cases.—Case II. G. M. B., æt 59, a sauce manufacturer, died April 24th, 1900. He had of late been drinking heavily, and had been sleeping at his place of business in Sussex Street, Sydney. On the 18th inst. he fell over some stairs at his place of business, and complained of having hurt his back. He stated to his wife that he had been assaulted three months ago. Beneath the left eye there was some discolouration due to bruising, which he said was the result of the assault. His wife removed him to his home, and he seemed to improve a good deal, but on the 23rd inst. he became worse, and died before the arrival of a doctor. *Post mortem* twelve hours after death: Lividity was well marked; rigor mortis universal; the pupils were equal and somewhat dilated. Beneath the left eye was a discolouration of a yellowish-green colour. On both legs were a number of small rounded petechiæ about the size of pin heads. In colour they were of a livid blue. The pleural sacs contained no fluid. Both lungs were deeply engorged and somewhat oedematous. On the pleural surfaces were a few petechial hæmorrhages. Otherwise the lungs showed no abnormality. The heart was somewhat enlarged, its aortic valves were thickened but competent; the right side contained a large pale gelatinous thrombus, which extended up into the pulmonary artery. A few small sub-endocardial hæmorrhages were found. The peritoneum showed a few minute scattered petechiæ. The liver was greatly enlarged, pale-yellow in colour, and the seat of an extensive cirrhosis with fatty degeneration.

The mucous membrane of the gall bladder was thickly studded with minute hæmorrhages. The stomach and duodenum were similarly effected. The stomach also showed signs of chronic gastric catarrh. The spleen was considerably enlarged, its capsule tense, its consistence somewhat subnormal. On section it was of a uniform dark reddish-brown colour. The kidneys were enlarged and softer than normal. The capsule was somewhat adherent. The cortex was swollen and of a pale greyish colour. It was found microscopically to be in a state of cloudy swelling, and in places showed some catarrh of the tubules, with a great increase in the intertubular connective tissue cells. There were no enlarged glands in any part of the body. The skull was quite normal, and no sign of recent or old contusion of the tissues of the scalp was found. The brain, beyond some marked congestion of the vessels of the meninges showed nothing abnormal. Smear preparations of the spleen pulp and of the blood of the median basilic vein were made, stained by dilute aqueous fuchsin solution and found to contain large numbers of small oval-shaped organisms showing marked bipolar staining. Films were also treated by Gram's method, but the organisms were found to remain unstained.

The case was therefore one of septicæmic plague and not, as was at first surmised, one of death from injury to the brain following upon an assault.

MEDICAL NOTES.

Treatment of Inebriety in Victoria.—The formation of a committee to investigate the different cures for inebriety has been completed by the Chief Secretary. The committee will consist of Messrs. M'Kenzie and J. W. Billson, M's.L.A., the Rev. Dr. Bevan, the Rev. Dr. Strong, and Dr. Godfrey, assistant Government medical officer. About half a dozen methods of treating alcoholics have been brought under Mr. Trenwith's notice, and a number of persons have submitted themselves as willing to be treated.

Treatment of Inebriety in England.—The working of the Inebriates Act of 1898, says the *Medical Press and Circular*, is reported to be a success. Two drawbacks are quoted, lack of accommodation—there are at present only 22 institutions dealing with the inebriate in the United Kingdom—and reluctance on the part of magistrates to put the measure into full force. There is plenty of scope for well conducted private homes and for charitable institutions for the poor. So far the results of the measure are very encouraging and it is hoped that having started in such a good work, the legislature will go still further and help to stay the liberty of the habitual drunkard.

The Inverell Lodge.—The Inverell medical men are so far winning and no applications have so far been received by the local lodge. We trust that they will get no application and that the profession throughout the colonies will endeavour to assist in the fight to their utmost.

Registration of Bread Vendors.—A bill to provide for the registration of bread vendors has been introduced into the Legislative Assembly on the motion of Mr. E. M. Clark. The measure provides that it shall be the duty of the local authority in each district to keep a register of the names and addresses of all bakers and sellers of bread selling or supplying

bread within their respective districts. Registration is to be made annually, and a fee of \$10 to be paid. It is also provided that inspectors may be appointed, and such inspectors are empowered to enter any bakehouse or warehouse and weigh and try all bread which appears to have been baked within 12 hours preceding time of search. Every inspector can exercise all the powers and authorities conferred on any inspector of weights and measures. Every baker who fails to comply with the provisions of the Act shall be liable to a fine not exceeding \$5, and on a second or subsequent conviction not exceeding \$10.

The Sanitary Institute, London.—The Sydney local examination in sanitary knowledge conducted on behalf of the Sanitary Institute, London, was held in the Technical College Ultimo, on the 20th and 21st December, 1901, the examiners being Dr. Frank Tidswell, W. S. Armstrong, and R. Dick, and Messrs. J. S. Bruce and J. Sulman. Thirty-five candidates presented themselves for examination of whom seventeen have been recommended for the certificate of competency to act as inspectors of nuisances, and six for the certificate of proficiency in practical sanitary science.

PERSONAL ITEMS.

We much regret that owing to our having been misinformed, we stated in our last issue that Dr. F. G. Brathwaite, the Chief Medical Officer of the New York Life Insurance Company in Australasia, had left Sydney for Wellington, New Zealand. Dr. Brathwaite was only absent on a visit there for a month.

Dr. A. A. DOYLE, late of Sydney, has succeeded to Dr. G. S. L'Estrange's practice, in Roma, Q. Dr. L'Estrange has left with his family on a trip to Ireland and Nordrach.

Dr. B. F. HARDY, late of Clayfield, has begun practice in Toowoomba, in conjunction with Dr. Elliott, of the Toowoomba Friendly Societies' Medical Institute.

Dr. A. G. SALTER, late of Pittsworth, Q., has returned after a two years' trip to England, and has purchased Dr. G. Comyn's practice at Red Hill, Brisbane.

Dr. A. Nicoll, of Tambo, Q., has sold his practice to Dr. G. Cory, and has left for Europe for a trip.

Dr. W. G. ARMSTRONG's laboratory, at Hornsby, Sydney, was utterly demolished by fire on Wednesday (8th inst.) night. We deeply sympathise with Dr. Armstrong in his heavy loss.

SIR JAMES GRAHAM leaves Sydney for Europe, via China and Japan on January 25th. He expects to be absent for six or eight months, and intends to devote his attention to the methods of civic government in the larger towns of the old world, and to study the latest development in medicine and surgery.

Dr. W. R. CLAY is returning to Sydney by the s.s. "Bungaree," which is due to sail from London about the middle of January.

The Water and Sewerage Board has granted leave of absence to the medical officer, Dr. T. Mailler Kendall, in order that he might represent the Board at the medical congress, to be held at Hobart in February next.

Dr. TAYLOR has resigned his appointment as Medical Officer at Georgetown.

Dr. G. F. BRADE has removed from Manning, W.A., to Omeo, Vic.

Dr. C. T. LITTLE, of Culverden and Hanmer Springs, N.Z., who secured his diploma in medicine at the local University, has been presented, by the residents in the Amuri district, with a gig and horse and harness, well equipped.

Mr. ALEX. LYONS, eldest son of Mr. L. Lyons, now of Melbourne, has just passed his final medical examination at Edinburgh University. Dr. Lyons is a native of Dunedin.

Dr. ROBERTSON, of Tapanui, was lately entertained at a social promoted by members of the Tapanui branch of the St. John's Ambulance Association, and presented with a handsome marble clock, suitably inscribed.

Dr. WM. BROWN has been elected chairman of the first Drainage and Sewerage Board for the Dunedin district.

Dr. KATE HOGG has commenced practice at 171 Macquarie Street.

Dr. JOHN THOMSON has removed from Broken Hill, N.S.W., to East St. Kilda, Vic.

Dr. M. W. GUTTERIDGE has removed from Launceston, Tas., to Melbourne.

Dr. FLEMING, of Tauranga, in November last, met with a serious accident, which necessitated his being brought to the Auckland Hospital for treatment. A cow broke through into his garden and gored him rather severely. The doctor is doing as well as can be expected, but it will be some time before he is able to attend to his practice again.

The practice of Dr. Maude Ashburton, has been bought by Dr. Boyd, late of Richmond; and that of Dr. Reid, Palmerston North, N.Z., has been bought by Dr. Walter Graham, lately of Victoria.

Dr. J. R. HUTTON, late of Castlemaine, Victoria, is at present staying at Rotorua, in New Zealand.

Dr. F. D. JERMYN, of Mount Gambier, S.A. has received from the Duke of Norfolk a valuable silver inkstand, suitably inscribed, as a memento of their acquaintance in South Africa. The Duke suffered a fracture of the hip joint through a fall from his horse in the great march of Lord Roberts' army to Pretoria, and Dr. Jermyrn successfully treated him for the injury. A complimentary note accompanied the present.

Dr. SEABROOK, late House Surgeon at the Broken Hill Hospital, left on December 22nd *en route* to Port Darwin. Prior to his departure the officers and nursing staff of the hospital presented the doctor with a gold repeating chronograph watch and a neatly-framed testimonial as tokens of their esteem.

Dr. JOHN THOMSON of Brisbane, has been appointed to represent the Government of Queensland at the medical congress, to be held at Hobart in February.

On 30th ult., the nurses and staff of the Hobart General Hospital presented Dr. Macgowan (late House Surgeon of that institution) with a memento in recognition of his services and kindnesses rendered them during his term of office. The memento was in the form of a collection of portraits of the staff, together with external and internal views of the operating theatre, the whole beautifully mounted in an oak frame.

Dr. R. BELLI, late of Walgett Hospital, has settled at Coonamble, N.S.W.

Mr. E. T. THRING, one of the Honorary Gynaecological Surgeons at Prince Alfred Hospital, Sydney, has obtained six months' leave of absence, and left Sydney on a visit to England on January 18th.

Dr. C. C. McDONALD, Mayor of Mount Gambier, S.A., recently fined himself 10s. for allowing his chimney to catch fire. The Municipal Council wished to refund the amount, but the Mayor refused it on the ground that he had broken the law and must accept the consequences.

We are glad to state that Dr. C. V. Bowker, Medical Superintendent of the Sydney Hospital, who has been indisposed for some time, has now recovered and resumed duty at the Hospital.

MEDICAL APPOINTMENTS.

The following Medical Appointments are announced :

NEW SOUTH WALES.

O'Connor, Arthur Charles, M.B., M.Ch. Univ. Syd., to be Government Medical Officer and Vaccinator at Bulli and Coalcliff, *vice* Dr. Clifton Sturt, deceased.
Shortt, Dr. W., has been appointed Coroner for the police district of Corowa, in lieu of Mr. A. D. Barnett, F.M.
Zimpel, Adolph, M.B., M.S. Aberd., to be Junior Medical Officer, Department of Lunacy.
The following gentlemen have been appointed to the Commission of the Peace:—Charles Ayres, M.B., etc., Hamilton; Henry Rufus Bell, M.B., etc., Murrumbidgee; Harold Graves Bennetts, M.B., etc., Temora; Dr. A. G. Henry, Coast Hospital, Little Bay; Henry James Dempster Innes, M.R.C.S. Eng., Mount Victoria; John Smith-Gutridge, M.D., Bungendore; Dr. Frank Tidswell, Board of Health, Sydney; Gustave Henry Stephen Zichy-Wolnarski, M.B., etc., Trangie.
Sydney Hospital.—The following were appointed resident medical officers for 1902, *vis*:—Messrs. H. M. Anderson, M.B.; Theodore Ambrose, M.B.; E. W. L. Combes, M.B.; W. A. R. Sharp, M.B.; William Seldon, M.B.; and F. Webb, M.B.
Prince Alfred Hospital, Sydney.—The following have been appointed resident medical officers:—E. W. Moncrieff, M.B.; E. O. Page, M.B.; A. Muscio, M.B.; D. Wallace, M.B.; P. L. Broadbent, M.B.; E. M. Stephen, M.B.

VICTORIA.

Baldwin, G. R., F.R.C.S. Eng., to be Hon. Surgeon to Out-patients St. Vincent's Hospital, Melbourne.

QUEENSLAND.

Doyle, Andrew Aloysius, L.R.C.S. Irel., etc., etc., to be Medical Officer at Roma, and Visiting Surgeon to the Prison at that place, *vice* Guy Stuart L'Estrange, L.R.C.S. Irel., resigned.

WEST AUSTRALIA.

Evered, Dr. A. C., to be Quarantine Officer at Albany, *vice* F. J. Ingoldby, resigned.
Harvey, Dr. William, to be District Medical Officer for West Kimberley, Quarantine Officer for the Port of Derby, and Public Vaccinator for the Urban and Suburban Districts of Derby and Rural District of West Kimberley, *vice* G. Harward Brown, deceased.

SOUTH AUSTRALIA.

Seabrook, Thomas Edwin Fraser, M.D., to be Acting Medical Officer at Palmerston, Acting District Registrar of Births, Deaths, and Marriages for the District of Palmerston, Acting Health Officer at Port Darwin, and Acting Protector of Aborigines for the Northern Territory during the absence on leave of Frederick Goldsmith, M.B., Ch.B.

Adelaide Hospital.—The following have been appointed resident medical officers:—Constance Helen Frost, M.B., Ch.B.; Elizabeth Eleanor Weld, M.B., B.S.; Helen Shaw, M.B., B.S.; Frances Snow, M.B., B.S.; and Oscar Sydney Flecker, M.B.

TASMANIA.

Willmott, Dr. Robert, to be Official Visitor of the Hospital for the Insane, New Norfolk, for the year 1902.
Pardey, Dr. James M., to be Honorary Medical Officer to the Launceston General Hospital.

NEW ZEALAND.

Collins, Dr. J. O., to be Medical Superintendent of the Provincial Hospital, Auckland.
Davenport, Harold Devereux, L.R.C.S. Irel. 1885, to be a Public Vaccinator for the District of Christchurch.
Ghiruth, J. A., M.R.C.V.S., to be Pathologist to the Department of Public Health, Wellington.
MacLaurin, J. M., D.Sc., F.C.S., to be Analyst to the Department of Public Health, Wellington.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

THE following additional list of legally qualified medical practitioners, registered under the provisions of Part I. of the "Medical Act 1890," is published for general information:

VICTORIA.

Barrett, Edith Helen, Albert Park, M.B. et Ch.B. Melb. 1901.
Cooke, James Douglas, Melbourne, M.B. Melb. 1901.
Fearnley, Warren James, Canterbury, M.B. et Ch.B. Melb. 1901.
Forshaw, William Joseph, Carlton, M.B. Melb. 1901.
Gutteridge, Matthew Wilkins, Melbourne, M.B. et Ch.M. Edin.; M.R.C.S. Eng. 1888.
Haig, Thomas Baker, Auburn, L.R.C.P. et L.R.C.S. Edin. 1900; L.S.A. Lond. 18.0; M.D. Brussels 1901.
MacKenzie, John Forbes Cook, Cheltenham, M.B. Melb. 1901.
Marsden, Charles Edward, West Melbourne, M.B. Melb. 1901.
Rigby, Ernest Horatio, Kyneton, M.B. et Ch.B. Melb. 1901.
Thomson, John, East St. Kilda, M.B. et Ch.M. 1875; M.D. Aberd. 1877.
Triado, Antonio Joseph James, Box Hill, M.B. Melb. 1901.

Additional Qualification Registered:

Griffith, James De Burgh, M.D. Univ. of Dubl. 1886.

QUEENSLAND.

Money, Percy Frederick, Woodlark Island, British New Guinea, M.R.C.S. Eng. 1883; L.R.C.P. Edin. 1883.

Re-publication.

Cole, Christopher Dillon Croker, Life Association of Australasia, Toowoomba, L.R.C.S. Irel. 1876; L.R.C.P. Edin. 1877.

SOUTH AUSTRALIA.

Steel, Dr. William Hart, B.M., B.Ch. Glasg. 1896.

TASMANIA.

Murphy, John Thomas, M.B. Melb. 1899.

BIRTHS, MARRIAGES AND DEATHS.

BIRTHS.

DAMMAN.—On the 20th December, at Penguin, Tasmania, the wife of G. W. Damman, M.B., of a daughter.

ROOK.—On the 8th December, at Clifton Hill, Ochariton, the wife of William Rook, L.R.C.S. Edin., of a daughter.

MARRIAGES.

COLE—JENNER.—On the 16th December, 1901, at the residence of Sir Frederick Sargood, Rippon Lea, Elsternwick, by the Rev. Frederick Warner, Frank Hobill Cole, M.B., et Ch.B., of Carlton, to Claire Josephine, fifth daughter of the late Hon. O. J. Jenner, of Melbourne.

HODGE—SADLER.—On the 10th December, 1901, at St. Mary's, Caulfield, by the Rev. A. J. H. Priest, Theodore Hodge, M.R.C.S., of Claremont, W.A., son of the late Rev. Henry Vere Hodge, rector of Middleton, Warwickshire, to Dora Webber, daughter of John Sadler, "Orwell," Kooyong-road, Elsternwick.

LITTLEJOHN—CLOSE.—On the 18th December, 1901, at St. John's, Darlinghurst, Dr. E. Sydney, third son of Mr. Thomas Littlejohn of Manly, to Margaret Alice Bowyer, eldest daughter of Mrs. Peter Close, of "Malua," Elizabeth Bay.

DEATHS.

OLUNE.—On the 3rd January, 1902, at his residence, Palmyra, Ridge Street, North Sydney, M. J. Olune, M.D., aged 64 years. R.I.P.

WILLIAMS.—On the 13th January, at his residence, No. 1 Royal Terrace, Nicholson Street, Fitzroy, Ezra Hulbert Williams, M.D., the beloved husband of Georgina Leonora Williams, aged 38 years.

BOOKS RECEIVED.

STUDENTS' HANDBOOK OF THE PRACTICE OF MEDICINE. By H. Aubrey Husband, M.B., C.M. Fifth edition. Edinburgh: E. and S. Livingstone.

THE URINE IN HEALTH AND DISEASE TOGETHER WITH ITS CHEMICAL EXAMINATION. By H. A. Husband. Fourth edition. Edinburgh: E. and S. Livingstone.

THE POCKET FORMULARY FOR TREATMENT OF DISEASE IN CHILDREN. By L. Freyberger, M.D. Vienna. Third edition. Rebman, 129 Shaftesbury Avenue, Cambridge Circus, London.

WATER SUPPLIES. By J. C. Thresh, D.Sc. Lond., M.D. Vic., D.P.H. Camb. Rebman, Limited, 129 Shaftesbury Avenue, W.C.

TEXT BOOK OF PHARMACOLOGY AND THERAPEUTICS. Edited by W. Hale White, M.D., F.R.C.P. Young J. Pentland.

AN INDEX OF SYMPTOMS. R. W. Leftwich M.D., Second edition. Smith, Elder and Co., 15 Waterloo Place.

THE PRINCIPLES AND PRACTICE OF MEDICINE. Wm. Osler, M.D., LL.D. Edin., F.R.S., F.R.C.P. Young J. Pentland, Knox Place, Edin.

NOTICES.

THE "GAZETTE" IS EDITED FOR THE PROPRIETORS BY GEORGE E. RENNIE, M.D., SYDNEY, N.S.W.; AND FOR THE OTHER BRANCHES OF THE BRITISH MEDICAL ASSOCIATION BY A. B. BROCKWAY, BRISBANE, Q.; H. W. BRYANT, WILLIAMSTOWN, VIC.; J. B. GUNSON, ADELAIDE, S.A.; HERBERT HORROCKS, PERTH, W.A. ORIGINAL ARTICLES WILL BE INSERTED SOLELY ON CONDITION THAT THEY ARE NOT CONTRIBUTED TO ANY OTHER PERIODICAL.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other States. Business communications should be addressed "The Manager."

Contributors will have to pay the cost of illustrations accompanying their articles.

MALE ATTENDANT for mental, inebriate, or general cases, seeks engagement. References and testimonials show 13 years' experience, including five years as attendant at Callan Park Hospital for Insane, three years as wardman in charge of Singleton Hospital. Address J. HILES, 161 Cecily Street, Leichhardt.

AUSTRALASIAN MEDICAL GAZETTE.

SPECIALISM IN MEDICAL WORK

By G. Affleck Scott, M.D., C.M. Edin.

Presidential Address delivered before the Ballarat District Branch British Medical Association.

(ABSTRACT.)

In treating of my subject the first point which naturally suggests itself is the origin and growth of specialism, and it shews itself to be one of the branches or one of the great trees of development which have been growing and forming themselves into the sum total of human society as traced to the present from the earliest days. The branch of specialism, to which we belong, is one of the earliest and most venerable of all, for the primal needs of man—food and drink—depend upon the basis of good health, and the attainment and maintenance therefore of health stands behind and underneath all the other necessities of humanity. And the reproach that has been made against medical science, that we are by its means vainly endeavouring to contradict Nature's great law of the "survival of the fittest" and perpetuate the existence of the unfit is really unfounded. What Huxley called the "artificial world (*i.e.*, the ethical) within the cosmos which men have succeeded in building up" is really an *imperium in imperio*; we do not ultimately alter "the struggle for existence" and the "survival of the fittest," but we increase the number of the survivors and we make those survivors as fit as possible.

But it is not in the separation of medicine as a specialism during the progress of civilisation that our immediate subject matter lies; it is with the sub-divisions of medicine into its smaller branches, and that is a matter both old and yet new.

The two great natural divisions of the healing art are comparatively new as to anything like scientific worth. For medicine was empirical till recent times, and is in fact too empirical yet. And the practice of surgery and study of surgical anatomy, which could have, and one would think should have, made early strides, are even later still.

A glance at the other divisions of medical science shews them also to have developed late in time.

One would think *e.g.*, the prevention of disease would be as much a subject for attainment and study as its cure; and yet how slow in developing was any rational method of attaining the end sought is shewn by the fact that the first British Board of Health is just over

fifty years old, and almost the last is still considering whether the principles of vaccination are sound. Hygiene should have been contemporaneous with hygiene of old, and it is but an infant yet.

Anæsthetics, again, are the invention of our own age. Cocain and the other local anæsthetics, which have done so much for patient and surgeon, are matters of yesterday; the gas and oxygen inhalant which, I understand, is established in Britain is so new that, although we are trying it now, we have not yet adopted its use here.

Again, scientific massage and electro-therapeutics are only really begun, and give promise of useful assistance to medical work.

Antiseptics and bacteriology are very modern sciences also, for we have seen and heard their founders, Lister and Pasteur, and many other still living eminent workers.

And, although serotherapy dates back to a century ago when Jenner introduced vaccination, yet the developments of that science, including tuberculin to combat tuberculosis, antitoxin to cure diphtheria, and the various forms of organo-therapy as remedies for myxœdema, goitre, etc., are all only so lately investigated that it is yet disputed how many or which of them have had even an opportunity of extinguishing or asserting themselves as permanent aids in the domain of practical medicine.

All these are branches of specialism, and the men who have made the sciences have been special workers in the various fields, all working towards the extension of general knowledge and general power to combat the enemies of mankind which medical science is called upon to meet and to vanquish. For it is a matter of ordinary reason and common sense that, short of complete attainment or perfect work (and of that there is no prospect), the greater the time and energy and thought devoted to one subject or branch, the greater will be the success consequent upon such effort. And, apart from brilliant occasional flashes of genius, it has been, in the history of science, the steady concentration of thought and mind and work upon one subject or branch which has been the main cause of progress; the discoverer (whether a specialist in the ordinary acceptance of the word or not) was acting as a specialist while working out his discovery and making the greater progress the more he so acted and thought. He may (as in the case of Rudolf Virchow) have been a jack of all trades but—able though he might be in all—

still he was only master in one. But our brain-waggon, running along this mono-rail, would land us in an indefinite subdivision of function and practice unless it met with obstacles which make us put on the brake and pull up to look around and see where we are going. And two of these supply the correctives to specialism run mad. One is that running along one line we are apt to lose sight of one of the two harmonious aims of specialism, which are (1) the perfecting of knowledge and skill in the special line and (2) the throwing of light upon the general whole. And the other is that one-line running makes us apt to lose sight also of the general principles which dominate the special as well as the general aspect of medical work. There is not so much fear, I think, of specialism making any man a one-sided man in matters outside the whole range of his science—for the brain, like the muscle, can only do a limited amount of work of one kind—and a great pathologist, for example, can be complete as a specialist in his own field while still finding time for politics and other occupations as Virchow did. Rather is the tendency to become one-sided within the range of one's science; for a gynaecologist may be tempted to remove ovaries where the general nervous system is alone at fault, and the criminologist who looks upon crime as pathological and not criminal may, by loosening the control power of those who are tending in the direction of crime, actually increase the amount of crime in society.

Specialism has certainly come to stay, and we see it at work in all branches of society. And medicine follows the same rule as the rest. In the first place there is no doubt at all about the propriety of the separate branch of alienism; and I cordially congratulate this Association that we are to have the privilege of possessing this year as our president, and as our representative at the forthcoming congress at Hobart, a man who has by pure worth made a name for himself in that great department of medicine. To Dr. Beattie-Smith has been due the two great necessary reforms in the department of alienism, for he has, like all reformers, after much trouble succeeded in introducing clinical teaching of Insanity to medical students in Melbourne (and every medical practitioner knows, from perplexed experience, what that means) and he has also effected the raising of the standard of nursing of the insane throughout the State—two services, at once scientific and practical, which lay the whole medical profession in Victoria under a deep obligation to our association's incoming president.

Then we have the almost equally separate

department of Public Health, and we continue to hope that our pilots and governors may some day develop the necessary interest to make this department an active and beneficial one. Forensic medicine again is a separable branch of our craft and, were it better developed, we should see less of the "differing of the doctors," in the witness-box, which is unworthy of ourselves and harmful to the community.

But now having these three—Sanitation, Aberration, and Legal Mystification—out of the way, we come to the less extraneous divisions of the body's distresses with reference to our subject. And the question arises—In what direction does reasonable specialism lie? And by that I mean the specialism which recognises its purposes and limitations such as I have already referred to.

Speaking generally our specialists have divided themselves into two lines: Firstly, physicians and surgeons proper; secondly, the class of specialists who divide the body into parts and treat these parts from both medical and surgical standpoints; then there is also the class of men, still very small, who confine themselves to the surgical aspect alone of one division of the body and leave the medical care of patients suffering from such complaints to others.

The profession, as well as the public, are much benefitted by the harmonious co-operation of specialist and general practitioner—and this fact is well indicated by the consideration of ophthalmology in relation to general medical science and practice, which is the second and chief division of the subject I have chosen for review this evening.

The benefit of ophthalmology in medical work depends largely, of course, upon the use of the ophthalmoscope, and its value lies chiefly in the fact that blood-vessels and tissue-changes can be visibly examined by its means, which are elsewhere only to be indirectly felt or inferred from symptoms. But, at the same time, this advantage is lessened by the fact that the eye possesses its own power of resisting or modifying some of these processes. Were the eye directly affected by all the various abnormalities of the general condition, it would be of immense value certainly to the physician, but it would lose much of its value as an organ of vision.

I shall just glance in detail at some of the organs whose pathological conditions illustrate the relation of ophthalmology to general work, and I look first at the connection between kidney complaints and eye conditions. And here,

as you know, we find two distinct lines of observation to follow—both expressing themselves in the fundus of the eye and being translated from specialist's observation into general diagnosis. It is all very well to say that the general practitioner should have a sufficient acquaintance with the ophthalmoscope to be able to get the data for himself, that is, however, only possible in the grosser forms of ophthalmic lesions, but in the fine distinction between the normal varieties of fundus and the commencing abnormalities (which are just those where early diagnosis is of value) it takes a skilled ophthalmologist all his time to form anything like reliable conclusions, and it is an impossibility for a busy general practitioner to learn or keep up the necessary knowledge.

There is still much work to be done in observing and classifying ophthalmic appearances in kidney troubles; but considering the short time that observation has been going on, there has been a fairly creditable amount of progress. "Dropsy" and "loss of sight" have been presumably "keeping company" for centuries, but we only know of this having been remarked in Britain since within the past century when Wills first described it. Twenty-five years later Bright noticed the loss of sight in albuminuria, but even Türck in 1850 considered that there was no causal relation between the two, and it was not till 1859 that Liebreich first described the ophthalmoscopic appearances of albuminuric retinitis.

As already mentioned, in kidney complaints there are the two classes of alterations in the fundus—the tissue changes, and the changes in the vessels—the first being shown in various layers of retina and choroid, and lens, etc. But all may be classed together as the effect of the albuminous surplus in the system, the effusion of albuminous fluid in the papilla causing the swelled disc, in the retinal layers causing the swelling in them, in the nerve fibres (by direct or indirect action), causing the degeneration which shows as the shiny white spots in the regions of the disc and the macula, and as foci of fatty degeneration and exudation which form the larger striæ and patches forming the book-picture of the condition of albuminuric retinitis, while the second class of alterations—those in the vessels—comprise: (1) diminution in calibre of the arteries, coincident with the high tension pulse of Bright's disease, and (2) hæmorrhages due to the double cause of high tension pulse and albuminous degeneration of the arterial walls. So that the resulting changes in the eye are demonstrably co-incident with, and throw consequently

reliable light upon, the general condition of the patient from the physician's point of view. Then again there are two other considerations of interest—firstly, from extensive statistics as to the prognosis of Bright's disease, it has been found that about 75 per cent. of cases die within a year after the onset of the retinitis, and 90 per cent. within two years. And as the proportion of Bright's disease patients who show albuminuric retinitis is estimated as from 10 to 30 per cent., the assistance given by the ophthalmoscopic examination is considerable, while frequently the detection of the early signs of retinal or vascular degeneration serves to allow of the prolongation of life by appropriate medical treatment. And one more point in this connection was, I remember, illustrated forcibly last year when I saw in consultation a pregnant patient who had developed what was reported as resuscitation of an old quiescent Bright's disease. Retinal detachment is rare, as you may remember, in Bright's disease, but in the few cases it has been reported, death followed very rapidly. Retinal detachment having in this case occurred within three days previously to my seeing the patient, there was good prospect that the induction of premature labour would save the sight to a large extent as well as lessen or remove danger to life. There were well-marked old degenerative retinal changes justifying the diagnosis of previous Bright's disease. Premature labour was at once induced. The patient made a capital recovery; and having, quite lately, the opportunity of examining the eyes, six months since the premature labour, I found that the detached retina had become replaced, and that vision had returned most satisfactorily; from bare p.l. when I saw it first up to $\frac{6}{18}$ now, and still improving; the other eye having regained normal vision, from $\frac{6}{24}$ as it was at first. Beside actual Bright's disease there are other forms of nephritis where the ophthalmoscopic appearances are of great value, as, for example, the condition of uræmic amaurosis, which occurs rarely in Bright's, but commonly in post-scarlatinal nephritis and also in nephritis of pregnancy, where a condition, which looks as grave as a case of Bright's disease, and where the blindness is even more alarming may sometimes from ophthalmoscopic appearances be diagnosed as hopeful instead of hopeless, and active treatment be early employed with the result of complete and almost immediate restoration of sight and recovery of health.

Allied with the retinitis, etc., occurring in renal disease, are the eye-conditions met with

in diabetes. But in diabetes there is as yet less reliable information and even greater field for investigation. Even as regards the relative frequency, for example, of cataract and retinitis in diabetes, contradictory opinions are given by equally good observers, and the conclusions as regards duration of life in cases of the latter are yet too vague to be of service. From the number of eye affections which occur in diabetes—iritis, keratitis, optic neuritis, retinitis, muscular and refractive anomalies, as well as cataract, we may hope for further observation to give us much more reliable data than we at present have as regards prognosis. It sometimes, again, occurs that a patient complains of nothing but dimness of sight, which is put down to "need of spectacles," "liver," etc., and these are tried without benefit when the use of the ophthalmoscope would reveal diabetic condition of retina, and the patient would have the benefit of early treatment of the diabetes—with the great chance of prolonged life or cure as a result.

Note in passing here the occasional occurrence of myopia in a diabetic case as one of the first indications of the disease, and where consequently the eye-condition apart from retinal trouble is the means of diagnosing or rather of sending the patient to a physician for diagnosis and treatment.

From the kidney we passed naturally to diabetes, and from diabetes the natural transition is to the liver, but here we have little to say. There is of course the elementary sign of jaundice, noticeable earliest in the conjunctiva on account of the thinness of that membrane; and there is the functional trouble occurring in the eyesight during liver derangement, but the connection between the various forms of liver disease and any corresponding ophthalmic changes has as yet not been established—even Landolt's view, lately expressed, that cirrhotic liver may sometimes be evidenced by a pigmentary degeneration of the retina is contradicted by other observers, and certainly as yet lacks confirmation.

Passing from liver to stomach and bowels, there is little again here to note; the danger of atrophy of optic nerve, with incurable blindness, from severe hæmorrhage from stomach or bowels should be remembered, and the ordinary blepharitis from dyspeptic conditions is worth noting also.

Look next at the case of eye affection caused by various drugs. I do not remember how many fall under this head. I suppose from 60 to 80 different drugs are known to have well-marked toxic effects

upon the eye. And seeing there are many of these in ordinary therapeutical use, their action is always worth remembering. Iodoform, for example, causes more frequent eye-trouble than is thought—the affection varying from slight temporary mistiness of vision to complete optic atrophy. Quinine blindness is the most commonly known of such cases. Salicylic acid, caffeine, and the coal-tar products have also an amblyopic action. The yellow-vision after santonin is, so far as I know, not followed by harmful effects. Lead, silver, phosphorus and arsenic, as well as occasionally bromides and mercury, are responsible sometimes for various ill-effects upon retina or vessels.

Time will only allow of a glance at the chief toxic amblyopia, which is of such wide-spread interest that it cannot be entirely omitted. I refer, of course, to tobacco and alcohol blindness—statistics are unusually unreliable in this class from the difficulty of distinguishing between the parts played by alcohol and by tobacco; for most patients indulge in both. I agree with Schweinitz in differing from Jonathan Hutchinson's view, that alcohol antagonises the evil influence of tobacco, but whether or not there is a pure alcoholic blindness apart from tobacco is still open to dispute. It does not occur in acute alcoholic, as it does in acute tobacco toxæmia, but I am inclined to think that, although rare in comparison, still, alcohol, *per se*, is one cause of toxic amblyopia. But there is no doubt about the reality of tobacco blindness. As to quantity of tobacco permissible, it is very difficult to say. I would be less concerned with how *much* a man smokes than with how soon he begins the habit, and *what* he smokes. Tobacco amblyopia is usually the result of long-standing, it may be slight excess for probably 15 years or more, and I have found it most common in men who have begun to smoke at too early an age. The etiology of the complaint is still being carefully investigated, but I shall not touch upon that here.

Passing from blindness due to nicotine-toxæmia, we naturally look at the various specific diseases, and here there is again a wide field for study and discovery. From the scourge of small-pox, whose dire results have decreased in Germany from 35 per cent. of all cases of blindness down to 3.5 per cent., since the introduction of vaccination we are here happily free, and it is now an unformidable enemy even in Europe. Scarlatina has its eye-victims, both from direct toxæmia and from the kidney affection already referred to. Measles, I find, has a too great proportion here of eye-affection, and more especially in

cases where the "eyes" (by that the parents mean the "eyelids") have not suffered at the time of the attack, but optic neuritis has subsequently developed. Erysipelas is sometimes accompanied by a dangerous optic neuritis. Cholera and dysentery by a retinal affection, partly toxic and partly from hæmorrhage. Malaria by various affections of conjunctiva, cornea, retina and optic nerve—I think, also, occasionally by arcus. As to diphtheria, the diagnosis between an "ulcerated throat" and ill-marked diphtheria is sometimes made by the occurrence of cycloplegia. In hay fever I am at present watching the course of several cases where correction of the refraction is benefitting or curing the complaint. The statistics of influenza are too recent to differentiate and classify eye-conditions due to its effects. As regards syphilis and gonorrhœa, the subject is too wide for present consideration. I should just wish to emphasize (i) the paramount importance of immediate distinction between the "cold in the eyes" of newly-born children and the virulent ophthalmia neonatorum which is still pitifully handicapping many lives by an early curable complaint being allowed to develop into hopeless blindness, and (ii) the equally important precaution of isolating the sound eye in adult gonorrhœal ophthalmia. In tuberculosis the ophthalmoscopic appearances enable sometimes acute miliary tubercle to be distinguished from typhoid, which it may resemble.

As regards the blood system, ophthalmic appearances in the shape of rhythmical changes in the retinal circulation, changes in the vessels, hæmorrhages from the vessels, etc., corresponding to valvular and other heart lesions and to diseases of the blood and circulatory system, I am tempted to discuss, but shall pass them by on the other side, and, before closing, just refer to one more class of cases, the most interesting of all, i.e., the nervous system. But for the fear of making this paper altogether too tedious, I should like to have devoted the whole time to this subject—for the evidence of the connection of ophthalmic signs and symptoms with cerebral lesions, while in some respects disputed and obscure, yet shows in others an unusually demonstrable clearness. The functional neuroses are interesting in this connection, I have observed cure of chorea and migraine and hay fever and (?) of epilepsy by the treatment of accompanying eye condition.

Charcot, for example, found the sheet-anchor in diagnosis between hysteria and the different organic nerve-affections to lie in the ophthalmic

examination, mainly in the accommodative spasm, derangements of the field of vision, and the maintenance of the lachrymal and pupillary reflex—this latter leading up to the strange region of hypnosis, and possibly also suggesting a parallel with those sleepwalkers who, moving with non-seeing but open eyes, avoid obstacles in their way. The sufferer from hysterical amblyopia, quite blind as to any visual impression from objects outside a small radius of say 8 degrees, will yet, without directing central vision to side objects, avoid them in walking; indicating that, although the patient cannot perceive the objects, yet the retina receives the impression of them, and reflex action takes place accordingly. This whole subject of the great variety of hysterical eye-derangement is worthy of careful study, and Parinaud deserves well of all neurologists for the aid he has given them.

Passing on to the organic nerve-lesions, the ophthalmic examination may sometimes shew the first diagnostic signs of tabes, and the Argyll-Robertson pupil and absence of primary atrophy frequently serve to distinguish between tabes and peripheral neuritis when other symptoms are not well marked. Sometimes, also, general paralysis of the insane may be suspected or diagnosed from the same source of examination. Disseminated sclerosis again has been frequently distinguished from hysteria by means of the eye conditions. Nystagmus and papillary changes being present in about half the cases, and hippus frequently; none of these being present in hysteria, and other symptoms taking their place. Passing without reference the various other general brain affections, look for a moment at the localizing eye symptoms in brain lesions, and in this regard the work is being slowly but very accurately done; and, while in some respects the results as yet are disappointing, in others they are satisfactorily clear and the practical effect both in diagnosis and treatment most promising for future beneficial co-operation between the ophthalmologist and the brain physician and surgeon. There is, we think, sufficient evidence now to locate the cortical centre for vision in or about the cuneus on the mesial surface of the occipital lobe and the calcarine fissure including the lingual lobe, instead of, as we formerly thought, the angular gyrus which now (although this is disputed), Gowers looks upon as the position of the centre for visual memory.

This whole subject is being well investigated and is of entrancing interest, and I look forward to its practical value being shewn still

more in the future by allowing diagnosis and removal of cerebral pus or hydatid (or perhaps other tumours) in that particular part of the brain and consequent cure of the patient instead of certain death.

I shall simply content myself, in conclusion, with emphasising this fact; seeing that the optic tract begins in the occipital lobe and passes right forward to the eye in front, and that there are in its path at least six distinguishable regions which are connected, sometimes very definitely, with visual symptoms—the six regions being (1) the occipital lobe, (2) the posterior limb of the internal capsule, (3) the optic ganglia, including the optic thalami, the corpora quadrigemina and the external geniculate body, (4) the optic tract, (5) the optic chiasm, and (6) the intracranial portion of the optic nerve, the field for investigation of cerebral cases in the light of ophthalmology is very wide and most promising.

You will note that I have been able to only rapidly glance at a few examples typical of a very large number of facts, but sufficient, I hope, to enforce the conclusion that a science, such as ophthalmology shews itself to be, which is connected more or less intimately with, and assists in the diagnosis, prognosis, and treatment of so great an array of diseases as various affections of the kidneys, liver, stomach and bowels, heart, circulation, spinal cord and brain, etc., etc., besides possessing its own immense direct value in sight giving to the blind and sight preserving to those who see, is well worthy to take its place as a special branch of the great tree of medical development; that it successfully carries out the two-fold object of specialism, viz., of producing the maximum of science and skill in the study and treatment of local, and of throwing light upon, and assisting in the study and treatment of general diseases, and that it becomes an active and worthy member of the great organic body of medical science, whose motto is the princely '*Ich dien*' (I serve), and whose objective of service is suffering humanity.

MEDICAL ETHICS.

By P. Sydney Jones, M.D. Lond., F.R.C.S. Eng.,
Sydney.

THOSE who are accustomed to peruse the columns of our English medical journals devoted to "letters and answers to correspondents" must have noticed the frequency with which questions of medical ethics are discussed therein.

It is evident from the number and variety of these questions that a large proportion of the members of our profession have but scant acquaintance with the rules which should guide them in their relations to their fellow practitioners, their patients, and the general public. This ignorance is not surprising when we remember that the ethics of medical practice are not taught in our schools of medicine. Nowhere, I believe, except in Paris, and there only by an occasional lecture, is instruction in the subject given to students. No doubt in all schools of medicine the teachers do in a casual and desultory manner impart some information upon the subject, but anything like systematic teaching is unknown. The student completes his course of scientific training and engages in practice insufficiently prepared to deal with the moral problems peculiar to his calling. No wonder that many breaches of the medical code of morals are committed, and this not from wilful disobedience to it, but from ignorance of its terms. Such knowledge as the young practitioner comes ultimately to possess is acquired after many mistakes, and, in some cases, through painful experience, from much of which he might have been saved by a little systematic instruction.

It was, I suppose, considerations such as these which moved the Senate of the University of Sydney last year to decide that at least one lecture on the ethics of medical practice should be delivered annually to the senior medical students. That body wisely determined that future medical graduates of the University should not labour under the disadvantages which I have pointed out.

It was not thought well to make attendance upon the lecture compulsory, but judging from the number of fourth and fifth-year men who attended, it would appear that the students regarded the arrangement with favour, and as one which, at least in part, supplied what was lacking in their curriculum. An annual lecture on medical ethics, even if it do no more, will serve to draw the attention of the students to the importance of the subject.

It may be argued that as medical ethics is but a branch of general ethics, no special code is necessary, and that the observance of the Golden Rule, "Whatsoever ye would that men should do unto you even so do ye also unto them," would be sufficient. It requires however, not only the good will, but considerable thought and sympathy to place one's self mentally in another man's situation. Moreover, character is so inscrutable, the motives and impulses of action are so hard to discover, that

the task is sometimes well nigh impossible of execution. Prejudice and jealousy too, (those deadly foes to our happiness and usefulness), disturb our mental vision and prevent us from seeing clearly the path of duty. Specific rules for guidance in the practice of our art are, therefore, necessary. The best men in the profession have felt this and have drawn up codes, all of which substantially agree. There are some differences of opinion upon the propriety of a few of these rules, but on the whole a code such as that of which Dr. Jukes de Styrap is the author, is accepted as binding by the profession at large.

It is not my purpose, even if it were possible in this short article, to discuss the whole code of medical ethics, but I should like to mention a few considerations bearing on our relations to our fellow practitioners which, if we always kept them in mind and acted upon them, would, I think, save us from many mistakes and estrangements.

The first of these relates to the course which we should adopt when we think we have reason to be aggrieved by the action of a fellow practitioner, or when from any cause a misunderstanding has arisen between us. We are too apt to conclude that our colleague has been actuated by unworthy motives, instead of which we should believe, until the contrary has been proved, that there has been some mistake which is capable of explanation. We should follow the great Physician's advice:—"If thy brother shall trespass against thee, go and tell him his fault between thee and him alone." We should say nothing to others, but call upon or write to the practitioner and, if possible, dispassionately discuss all the circumstances.

A satisfactory explanation will often be forthcoming, and even as I have experienced in my own practice, a lasting friendship will sometimes be formed. Should, however, this course of action fail to remove the grievance, the proper plan is to submit the matter in dispute to the arbitration of some such body as the Council of the British Medical Association, or of one of its Branches, or failing it, to the arbitration of three medical practitioners of repute, one to be nominated by each disputant and the third by the selected two.

In this connection I would point out the beneficial influence of frequent meetings of members of the profession in scientific or social gatherings. Nothing is more conducive to harmony and good understanding between practitioners than such meetings. Indeed, they do more than remove misunderstandings and rub off asperities, they constitute a check upon

those who may be disposed to follow an improper or unprofessional line of conduct, for in proportion to the frequency with which the practitioner associates himself with his fellow practitioners, will it become difficult for him to violate the rules of professional life.

As an old practitioner who has himself experienced the advantages of frequent meetings with his medical brethren, I would urge upon my younger colleagues the wisdom of "not forsaking the assembling of themselves together."

The second consideration has reference to the course which we should adopt when asked for an opinion on a case as set forth by a layman, or when obliged to listen to the disparaging remarks of a patient upon the conduct of his case by his previous medical attendant. This is a position in which we are frequently placed, and it is one which calls for the utmost tact and caution. Seldom indeed are the facts correctly reported; something material is omitted or something is added which gives the case a false complexion, and as this is not always done in a manifestly malevolent spirit, but simply from thoughtlessness or from the want of appreciation of the exact meaning of words, or it may be from the desire to heighten a story, we are the more likely to be led into unwary speech. Of course, the best plan is to avoid expressing any opinion at all, though this is not always satisfactory, for silence is often taken for assent to the views expressed. We should at any rate exercise the utmost reticence, and certainly we should never act upon such a statement without the most complete corroborative testimony of its truth, and on no account should we allow it to influence our behaviour towards our fellow practitioner until such evidence is forthcoming.

The third consideration applies to our attitude when consulted at our own rooms by another man's patient. There is some difference of opinion on this matter. Should we in every case on learning the fact decline to prescribe and propose a consultation with the doctor, or may we regard our consulting room as neutral ground on which we are at liberty to give advice to anyone coming to us without regard to the medical man who has been attending him? The Conseil-General des Sociétés d'Arrondissement of Paris has recently declared emphatically in favour of the latter course. To my mind, however, the proper course in this as in so many other instances, is the middle one. We must all admit the right of the patient to have as many opinions on his case as he pleases, and we should remember that a large proportion of the sick are unable to bear the extra cost of a

consultation of medical men; also that there is some truth in the patient's contention that in seeing a consultant alone he is more likely to obtain an unbiassed opinion, for we are all more or less influenced by the views of others. On the other hand, to adopt in all cases the course recommended by the Paris council would, I think, be wrong, and would tend to prevent that mutual and respectful co-operation which is so desirable on the part of the consultant and the general practitioner. With the experience gained by a quarter of a century of consulting work, I think the course which I have always adopted and which on the whole has worked satisfactorily, is the right one. I do not regard it as obligatory upon me in every case to ask the patient if he is under the care of a medical man. If he is, the fact usually comes out in the course of the interview. Then, if the case is not of a serious nature, and does not need constant attention, I have no hesitation in treating it without reference to the usual medical adviser. If, on the other hand, it is a grave one, and requires the watchful care of a medical man, I recommend the patient to return to his family doctor, and I write a note to that gentleman informing him that I have seen the patient, and giving him my views of the case. I have no reason to think that this course has ever been resented, or given offence, and on many occasions I have been thanked by the practitioner for adopting it.

We all admit that it is the prime duty of every member of a learned profession such as that of medicine to promote its honour and dignity; to raise its status and extend its influence and usefulness. We shall best do this by ourselves maintaining a high standard of moral excellence, by a careful observance of the ethical code, by a courteous bearing towards all men, and by diligence in the cultivation of our science. It is only when we are true to ourselves, true to our fellow practitioners, and to the public, that we shall secure that respectful consideration which is our due. How fully the Greek sage and father of medicine, Hippocrates, realized the sacredness of our obligations is manifest in the oath which bears his name, and as some of my younger readers may not be familiar with it, I will conclude these remarks by quoting Dr. Adams' translation of it.

"I swear by Apollo and Æsculapius and Health and all Heal and all the gods and goddesses that according to my ability and judgment I will keep this oath and this stipulation—to reckon him who taught me this art equally dear to me as my parents; to share my substance with him and relieve his necessities if required;

to look upon his offspring in the same footing as my own brothers, and to teach them this art, if they shall wish to learn it, without fee or stipulation; and that by precept, lecture and every other mode of instruction I will impart a knowledge of the art to my own sons, and those of my teachers, and to disciples bound by a stipulation and oath according to the law of medicine, but to none others. I will follow that system of regimen which according to my ability and judgment I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to anyone if asked, nor suggest any such counsel, and in like manner I will not give to a woman a pessary to procure abortion—with purity and with holiness I will pass my life and practise my art. I will not cut persons labouring under the stone, but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick, and will abstain from every voluntary act of mischief and corruption, and further, from the seduction of females or males, freemen or slaves. Whatever, in connection with my professional practice, or not in connection with it, I see or hear in the life of men, which ought not to be spoken of abroad, I will not divulge as reckoning that all should be kept secret. While I continue to keep this oath unviolated, may it be granted to me to enjoy life and the practice of the art, respected by all men in all times! But should I trespass and violate this oath, may the reverse be my lot."

THE MEDICAL CURRICULUM.

By J. T. Wilson, M.B., C.M., Edin.; Challis Professor of Anatomy, University of Sydney.

To any who have attentively watched the development of the medical sciences and of medical teaching during the past twenty-five years, it must have become evident that if we have not already attained, we are at any rate fast approaching, a limit of mere expansion of the subject-matter of ordinary medical training.

The burden upon the student of the multifarious subjects of both practical and scientific importance, of which he is now expected to have a sound working knowledge, is steadily increasing. It is, indeed, already so great as to constitute a positive hindrance to the natural and

healthy development of a spirit of intelligent and disinterested inquiry, and of genuine interest in the subjects themselves. A comprehensive and rational grasp of what may be called human biology, both normal and pathological, is well-nigh out of his power. The unity of the whole is crowded out by the detail. He is unable to see the wood for the trees. Let it be borne in mind that this is true not only—perhaps even not so much—of the scientific subjects of the curriculum, but of the practical and professional ones. The tendency to the splitting-off of subordinate divisions of the traditional branches, for the purposes of a more adequate instruction, and the tendency to raise such sub-departments to independent or quasi-independent rank, have disturbed the equilibrium of the later years of the curriculum, and have been productive of results, both as regards study and examination, which were not contemplated, and are by no means wholly desirable. The tendency indicated has itself been quite natural and its aim thoroughly laudable, but the ideal inspiring it has been akin to that which enabled the scholar some centuries ago proudly to exclaim: "I have taken all knowledge for my province."

And just as, with the growth of human knowledge and attainment, such an ideal became impossible of realisation to the scholar of even the seventeenth or eighteenth centuries, so it has become impossible of attainment within the narrower circle of medical science at the beginning of the twentieth. And until this is thoroughly realised, the difficult problems of modern medical education cannot be satisfactorily solved.

Within the limits of a brief article it is, of course, impossible to enter into any criticism in detail of the principles and methods of the medical studies and examinations which are embodied in the curricula and regulations for medical education now ruling in most of our medical schools. In a recent address on "Medical Education,"* the writer ventured to express his views in regard to certain features of these. The general nature of the criticism there offered is embodied in the conviction that the uniform, rigid and inelastic character of our present curricula is a practical evil of no little magnitude, and that the efficiency of our system of education is menaced by the continued multiplication of the branches of medical science and practice, with all of which every student is expected to make himself equally familiar. Another element of evil which follows inevitably

in the train of our presently recognised method of training, is the ever-increasing bondage to the examination system, which often proves a most efficient device for crushing the soul out of the individual work of the student. In an editorial comment upon the address above referred to, the editor of the *Medical Press and Circular*, 20th November, 1901, well remarks:—"The student's life is one continuous struggle with examinations. He has come almost of necessity to look upon each course solely as a preparation for an examination. He becomes an adept in discerning the points which are likely to have the greatest examination value. The lecturer whose discourses are considered to most nearly suit the examination which is to follow is most carefully listened to; the professor whose lectures are calculated to enable the student to justly appreciate the great principles of the healing art, or to dip below the surface of the subject, rather than to help him to pass the examination, finds his discourses neglected. These teachers become, perhaps unwittingly, the greatest friends of the 'coach.'"

Though the latter objection may apply with less force in places in which only one medical school is in existence—even there it is not destitute of applicability—the general principle, as applied to the character of the work of the student, holds with undiminished strength.

An undue crowding of subjects, more especially in the later years of the medical curriculum, will probably be admitted by the majority of those who are familiar with our schemes and systems of medical education, and it cannot be denied that, with the more complete organisation of the various sub-departments, both of scientific and of practical hospital work, we are promised, or threatened with, still further additions to the teaching resources of our medical schools, and thus a further expansion of the area with which the medical student is supposed to make himself familiar. What is to be our attitude to this progressive expansion, which in itself is undoubtedly both a valuable result and a potent means of educational development?

An obvious expedient for the solution of the difficulty, would, of course, be the addition of another year to the already lengthy curriculum. But this would mean an additional educational burden which it may be doubted whether the community is able to sustain under present circumstances. And it may also well be doubted whether a mere extension of time affords the best means of enabling the student to cope

* *Intercolonial Medical Journal of Australia*, 30th Sept., 1901.

with an indefinite enlargement of the area of detailed knowledge. Or perhaps one should rather say that there are very real limits to the utility of a mere increased acquaintance with new masses of detail of the most varied character. It is at least possible that the real capacity of the student and perhaps even the effectiveness of the practitioner is not really increased, but rather diminished, by the attempt to become master of all fields of medical knowledge. And it is an attempt which in these days must inevitably fail.

Can we then entertain the proposal to return to the less complicated conditions of medical study which prevailed prior to the more recent extensions of medical teaching? No one, surely, will be found to advocate any such reactionary course. To do so were to ignore the very real advance which modern developments after all do represent. We must beware of throwing out the baby along with the bath. It is entirely right and proper that the teaching of our medical schools should reflect in the fullest and widest sense the full development of all branches and departments of medical science and practice.

One sometimes encounters a proposal, though perhaps with less frequency than formerly, which aims at the economy of the time of the student of medicine by minimising the basis of his general scientific studies. Now, were the practice of the art of medicine merely a practical craft, carried on by the aid of systems of empirical rules, such a course, though even then regrettable in the interests of general scientific culture, might, under the pressure of circumstances, be perfectly justifiable. It is perhaps significant that the suggestion referred to is made less confidently and is less loudly echoed at the present time. For at no period in the history of medicine has the art and practice of medicine been seen so clearly and immediately to depend upon the application of the principles and methods of general scientific procedure as is the case at the present time. The principles, the methods, the facts, of Chemistry, Physics and Biology, not only constitute the foundations, but they take no small part in the superstructure, of the fabric of modern scientific medicine. More and more are the distinctively medical sciences realised as compounded of these three ingredients. What, for example, is the science of Physiology other than the practical application to the human organism of the data and the conceptions which these sciences afford? And the modern physician who is not saturated with the conceptions of Physiology is a mere empiric, the

representative of a decadent type. The goal of medical education will assuredly not be reached by the sacrifice of the basal elements of training, but by an even more thorough discipline and absorption in their radical and fertile truths.

Is there, then, no way by which we can extricate the student from his present and future embarrassment without sacrificing, on the one hand, the thoroughness of his foundation in scientific principles and methods, and, on the other, the high and the increasing organisation and specialisation of the teaching of medical science and practice in our medical schools, whilst still respecting the conditions of a curriculum of not immoderate length?

A practical solution of this most complex problem will, in the opinion of the present writer, be found in the gradual adoption of some system of elective studies within the limits of a broad curriculum rendered elastic by its operation. And, for the reassurance of the more timid amongst would-be educational reformers, it may be stated that such an attempt at a solution is by no means in the air, but is actually in operation in English-speaking medical schools of the highest repute, such as the University of Harvard and the Johns Hopkins University of Baltimore.

The general nature of the system may be partially gathered from the following reference to it in the words of Professor C. S. Minot of Harvard:—"The required (i.e. the compulsory) studies in medicine should be reduced to the minimum, and numerous electives provided for every year of study. These proposed electives may be in subjects already taught, and may also provide courses not usually offered, such, for example, as examination of the blood, pathological chemistry, and psychology in its medical aspects. The elective system is the educational answer to the tendency toward specialisation in practice, and I believe that we have no choice as to its adoption."

It is as well to guard at the outset against certain misconceptions which the casual reader is liable to form of such a scheme. Any elective system certainly does mean specialisation within the limits of the student curriculum; but it does not mean that such specialisation should be allowed to cut into the broad and deep basis of general medical training which experience and medical educational authorities must lay down as a minimum standard of all-round attainment. What is claimed is (1) that we are now already actually insisting, and tending more and more to insist on, a specialisation on certain lines, considerably in advance of a

reasonable standard of merely general knowledge and attainment; (2) that every individual student without exception is compelled to follow exactly the same lines of this more specialised medical study, without regard to his tendencies, capacities, and inclinations; and (3) that, on the present lines of advance, if we add to the resources and effectiveness of a medical school by introducing the teaching of a new branch or sub-department, such an addition remains practically barren of result, and its introduction futile, until, or unless it is made a compulsory subject of study and examination. With an already over-full curriculum it is not to be expected that the individual student will choose an additional branch of special study, however attractive it may be to him individually, so long as its choice has no effect in relieving him from the necessity of following up several other branches which are just as much specialties, but which already have a place in the compulsory list of subjects. It need hardly be said that under the term specialties are included those which are purely scientific as well as the specialised sub-departments of practical or professional importance.

It must soon be recognised, if it is not already recognised, that we simply cannot go on attempting to make every one of our students scientific neurologists, thorough histologists, physiological chemists, experimental physiologists, pharmacologists, pathological histologists, expert bacteriologists, ophthalmic surgeons, experts in psychological medicine, public health specialists, as well as sound and well-trained practitioners of general medicine, surgery, and midwifery. But it is perfectly practicable, and also highly desirable, that each graduate should, in addition to having received a sound and thorough grounding in the general and indispensable subjects of medical training, have devoted special attention to, and have so far mastered, a certain number of the above-mentioned specialised branches. The list of these might, indeed, with advantage, be considerably amplified by the inclusion, for example, of pathological chemistry, diseases of children, skin diseases, diseases of the ear, throat, and nose, and no doubt a number of other subjects. So far as the writer can see, there is, for example, no very substantial reason why either ophthalmic or psychological medicine should be compulsory in preference to several other branches. The teaching of what may be termed *emergency* work in both these departments might perfectly well be taught by the teachers of general medicine or surgery, as indeed was formerly the case. But it is highly

important that these subjects should continue to be taught up to a University standard as subjects of election, which, as such, would ever claim a considerable proportion of followers.

A slight consideration will suffice to satisfy one that an elective choice by the student, from year to year, of certain more specialised subjects or areas of study, in addition to the more general minimum work which must ever be compulsory, need not be a wholly arbitrary one. At the outset, indeed, his choice of special branches would be largely dictated by the student's bias. And the opportunity to indulge this personal bias in some direction would be a boon and an inspiration to many a student. In subsequent years the direction of election would be largely predetermined by that of previous years. One could easily map out various lines of special work from year to year which would be distinctly congruous, or at least parallel with one another; and thus a unity of development would be attained. There is no reason why recommendations as to such lines of work should not be made by the authorities, not as rigid regulations, but as a guide and assistance to the student.

One concrete example only of what is meant by the operation of the elective system may here be considered in detail, as an illustration of the manner in which such a system might be worked. In the teaching of anatomy, the anatomy of the central nervous system nowadays demands treatment in considerable detail. It is necessary and proper that the student should have the opportunity afforded of acquiring that detailed knowledge which, to the future physician, may be absolutely of as great importance as is the knowledge of the relations of the common carotid to the future surgeon. Yet it is simply not necessary that every student should be burdened with the heavy task of acquiring a detailed knowledge of all those nerve tracts and systems of neurones which it is needful to demonstrate in any adequate exposition of the anatomy of the central nervous system.

Again, whilst a sound and fairly accurate knowledge of regional anatomy must be acquired by every student, there is a degree or kind of knowledge of this subject which can only be reached by careful and prolonged study of series of frozen sections through the body, and which cannot properly be expected of the average student under present conditions. But if special attainment in either of these two special branches were to be accepted as an alternative, absolving from specialised knowledge in the other direction, there is no doubt that it would

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THE SOLUTION OF THE SEPTIC PROBLEM.

By D. Montgomerie Paton. I.R.C.P., L.R.C.S.
Edin., L.F.P.S. Glas., Kew (Vic)

LAST century saw great advances in the healing art, and where it did not quite solve *all* the problems of medicine, it saw the solution of some, and suggested the means of solving others. Among the problems left for this new century were three which stand out before all the rest, viz., Malignant Disease, Tubercle, and Sepsis.

To the latter the writer has now given three and a half years' practical work, following a discovery which gave him the clue which, followed up, led to the solution of the problem. The clue was obtained as follows:—Four years ago, a good deal was written about the action of diphtheria antitoxin in diseases other than diphtheria, and amongst the statements then made, two more particularly struck him. One was that diphtheria had been given hypodermically for sepsis with success; the other that it had been given orally for diphtheria, and also with success. This led to the suggestion that, given orally, it might possibly be successful with sepsis. Some diphtheria antitoxin was prepared in a form suitable for oral exhibition, and very soon a case turned up which gave the required test. A man, *æt.* 61, had been bitten on the hand by a cat, and had a superficial erysipelas, which easily yielded to treatment. A week later he returned with a most acute phlegmonous condition of hand and arm, with all the symptoms of resorption of toxins—headache, malaise, temperature over 100°, anorexia, etc., etc. The first impulse was to incise the back of the hand, which was swollen immensely, tense, bright, and shining, and give him an injection of antistreptococcic serum, but recollecting the previous idea, he was given 1000 units of diphtheria antitoxin in four doses, and told to come back next day. He did so, and was found to have lost all constitutional symptoms, temperature 97°, head clear, and a visible improvement in the hand, less pain, and able to move his fingers. After this he would not allow me to touch it, but demanded more of the same medicine. He had no other treatment except bathing it with *spt. vini. meth.* He was discharged on the 13th day, perfectly well, but with stiffened fingers from tendons being fixed in remains of inflammatory processes, and now he carries an exostosis on one of his metacarpals as a memento of the occasion. Now he would get two or three times as much antitoxin, and be cured so much the more quickly.

This was the first case, and from that time (March, 1898) the clue has been followed up, until not less than 9,000,000 units of diphtheria antitoxin have been used, and now the definite action of the serum has been so far determined as to enable me to say that its range of action is as follows:—

- I. Specific for the staphylococcus and streptococcus in all their varieties.
- II. Specific for simple inflammation, traumatic, and whether we regard such inflammation as being a distinct entity or only an attenuated sepsis, Diphtheria antitoxin makes no distinction.
- III. Has no parallel in medicine as an absorbent of inflammatory tissues left from the previous I. and II., and also of effused blood.
- IV. Has considerable influence on the coagulability of blood.
- V. Has great power in some depressed nervous conditions, probably due to septic conditions acquired or to auto-toxæmia.

Now, in the eyes of the uninitiated, this is very ridiculous, and at first sight it seems so. Here one may confess that it took many a long day to get rid of scepticism, and had there not been pretty continual success, it is more than probable that this would never have been written. One of the first objections taken to it was that antitoxin was destroyed in the stomach, and hence was of no use given that way. For a long time there was only the clinical evidence in my own practice, which was accumulating every day, but in course of time collateral evidence began to arrive, and shortly as possible the following are the answers to the objection stated above:—

- I. Diphtheria antitoxin is much more difficult to destroy than its corresponding toxin. Heat 60° C. (Roux and Yersin) destroys the toxin, but 70° C. does not destroy the antitoxin. (Medical Annual, 1900, p. 55).
- II. Carrier (*Ann. de l'Inst. Pasteur*, 25th May, 1899, p. 435), comes to the following conclusions *re* antitoxin—those experimented upon being tetanus and venom.
 - (a) Ptyalin does not modify antitoxic serum.
 - (b) Gastric secretion exerts little effect upon the antitoxin.
 - (c) Bile does not modify any of the antitoxins studied.
 - (d) Pancreatin modifies strongly and ultimately destroys.

- (e) Succus entericus seems capable of destroying them.
- (f) Intestinal bacteria and epithelium also act destructively.
- III. Parallel to antitoxin may be quoted the oral exhibition of glandular and other organic products such as thyroid and supra-renal, which are given freely and with the best results, and yet there cannot be the slightest doubt that while the glandular portion is digested in the process, the active principle, on which depends the characteristic therapeutic effects of the gland, escapes digestion and goes on unaltered to do its own work in its own way.
- IV. The skin eruptions produced by the hypodermic use of diphtheria antitoxin, have been proved to be caused by the serum and have nothing to do with the antitoxin. That even this part of the serum is absorbed so unchanged that it produces in suitable cases its characteristic eruption when given orally is proved by cases occurring here and there in my own practice and in that of others using antitoxin orally. And if this part of the serum is absorbed in such a form as to be capable of producing its characteristic symptoms, how much more probable is it that antitoxin is absorbed in an active form.
- V. Carrier finds that gastric secretion has little effect on antitoxins. With diphtheria antitoxin my experience shows that the change is made as follows:—Diphtheria antitoxin *hypodermically* is specific for the Klebs-Löffler bacillus, and weak for the septic organisms; *orally* it is specific for the staphylococcus and streptococcus and weak for the Klebs-Löffler. The writer has had to give it hypodermically after trying to cure diphtheria with it given orally, and is of opinion that those cases recently reported as diphtheria cured by its oral exhibition were probably largely septic and mildly diphtheritic.
- VI. Need one add their own experience of three and a half years' hard work, the use of 9,000,000 units of diphtheria antitoxin, the grateful thanks of patients and their united testimony all agreeing with my own observation to prove the worth and value of the remedy in its own peculiar sphere.

In that sphere are included erysipelas, peritonitis, appendicitis, acute rheumatic

polyarthritis, puerperal infection, secondary infection in phthisis, traumatism, bronchopneumonia, abscess suppuration—*et hoc genus omne*—wherever the staphylococcus and streptococcus are to be found.

The form in which it is now being used in my own practice is to add carmine 8 grs. per 3i. to the B.P. solution of tragacanth as a colouring and suspending agent. The formula would then run:

R. Diphtheria Antitoxin, 3000 units.

Trag. c carmine q.s.

Aq. ad. 3ii.

M.

Sig.—Dose 3ss. = 750 units—varies from night and morning to every four hours, but the latter is only used in exceptionally severe cases, and it is better to give too much than too little. For erysipelas 3ss. 8tis. horis is usually effective. For acute peritonitis and appendicitis 3ss. at once, 3ss. in two hours, 3ss. four hours later, and afterwards 6tis. to 8tis. now usually does all that is required. For children the full doses may be given, as the antitoxin is harmless, but usually for small children half the dose is quite effectual. In about 1 per cent of the cases either a little kidney irritation or skin eruption may be seen, but they are of the most superficial and fleeting character.

The best way to begin the treatment is to use it in some septic or simple inflammation visible to the eye, as in erysipelas, carbuncle, or traumatism, to reduce inflammation, remove pain, and bring the process to a surprisingly quick end. When the principle has been established in what may be seen it can then be trusted to do its work in what is unseen. The skilful use of it comes only with experience, but the principle can be depended upon and where the diagnosis is correct, and the case within the limits of the treatment the results are more certain than in any other, as no idiosyncrasy of the patient hinders its action, except such as prevents its inception and absorption. It really does not treat the patient, but his unwelcome guests.

Any other suitable treatment may be added as required, but as time goes on and confidence in antitoxin is gained, many of the ordinary adjuncts are discarded, and antitoxin is trusted to do the whole of the work.

Abscess is the great difficulty, and has usually to be incised as in ordinary cases, although by the use of antitoxin its maturation is usually hastened, and many of the constitutional symptoms are abated. If the inflammation be got in time the process can be readily aborted. In this as in all serum treatment the earlier

the case is taken in hand the less antitoxin will be required. Its action orally in septic conditions is exactly parallel with its action hypodermically in diphtheria. Given at the first onset of the disease the infection is promptly met by a comparatively small amount, but if neglected the amount required for cure increases rapidly for each day in which the process is unchecked. There is an exception to this, and that is in a person in which the septic process has run its course to a large extent, and has been met by a natural antitoxin formed more freely in some than in others. In such cases the virulence of the infection has been greatly modified, and nature requires only a small reinforcement to effectually expel the enemy. Such conditions arise only in those cases in which the virulence of the infection and the antitoxin-forming reaction in the patient, are of such a nature as to allow the patient a chance to fight the disease. As this exception only happens after a long and serious struggle with the disease, common sense should lead us to prevent or promptly treat all such cases in their earliest stages. The remarkable results obtained by Wernicke and Behring on this point emphasise what has been said. Using diphtheria virus they found that given an amount of antitoxin necessary to antidote a lethal dose of diphtheria virus if given at the same time, eight hours afterwards 10 times the amount of antitoxin, and 24 hours afterwards 50 times would be required to antidote the dose. Although the staphylococcus and streptococcus are not usually so rapid in their growth as the Klebs-Loeffler, yet they increase rapidly enough, and in very virulent cases, unless promptly treated, they act so quickly that the patient dies completely overwhelmed by the infection. It stands to reason that a local peritonitis will require less than the same attack when it has become general and the principle holds good all through.

The question is not is it ridiculous? is it revolutionary? is it unheard of? but *is it true?* Nothing but actual test is of any value in settling the question, for no such use of antitoxin is on record for such diseases. It is no use quoting accepted opinions on the subject; they are only theory, and do not touch the matter in hand. Actual trial will soon settle the question, and the writer is prepared to stand or fall by the results. The statements made are based on actual facts, and if they contradict theories so much the worse for the theories if the facts are right. To test the matter let any one take a case of erysipelas, acute peritonitis (local or general), acute or chronic appendicitis,

or carbuncle, use diphtheria antitoxin *alone* as directed, only feed the patient and attend to his secretions—no poulticing or anything of the kind—and let the results settle the question. Of course where there are collections of pus they will require incision, and it will affect no other infection than the staphylococcus or streptococcus. If such others are present, then the treatment will eliminate the septic and leave the others behind.

The question is of such tremendous importance that anything claiming even to influence the septic infection demands the immediate and careful attention of the profession in all lands.

Many men ask me how does diphtheria antitoxin do what is claimed for it, and seem to think that until that question is answered the treatment is outside the range of practical therapeutics. Nothing could be more ridiculous than such an idea. Frankly, I do not know, and we certainly know practically nothing about how the different sera act; we only know that they do so, and, as in hypodermic use of the serum for diphtheria, give it, get the results, and wait patiently for the explanation as to how it is done. True, Ehrlich has a theory which, if true, and it has to be proved, would explain fairly well the action of all such antitoxins; but it has yet to be proved, and the writer for one is in no great hurry for the explanation, so long as he can get the practical results in the treatment of disease. Like Jenner, who had been in his grave for close on a century before any feasible explanation of his work could be given, he is quite content to leave to his grandson or great-grandson the task of solving the problem, satisfied to know that he can in the meantime reap the benefits of the discovery.

Suppose such a theory was applied to medicine in general, viz., that we use no treatment until we know precisely and scientifically how it did the work peculiar to it, how much would we have left? The practical man who is really desirous of helping his patients uses all means which have been proved to do the work required, without waiting for science to explain the why. He is just as pleased as any other when the explanation comes, but takes the present benefit whenever he can get it.

The writer will be glad to answer any questions of a practical nature which may trouble any practitioner giving antitoxin a trial in his own practice, that is, as far as his experience with the remedy will enable him to do so.

The difficulty is not with the prescription, but with the choice of cases suitable for the treatment, etc. Rules for this will gradually be

found, but the writer is of opinion that it will be at least ten years before the profession have thoroughly mastered what is nothing less than a revolution in therapeutics. The serum used in all the work has been Burroughs, Wellcome and Co.'s Liquid Antitoxin, and can be had for 2s. 6d. per 2,000 units. The experiences of the last three years and a half, with plenty of clinical illustrations, are now being collated, and will be published as early as the exigencies of a busy practice will allow.

THREE CASES OF SYPHILIS.

By E. Ken Herring, M.R.C.S., L.R.C.P., Shepparton, Victoria.

THE recorder of cases of a common disorder should be able to claim that something may be learnt from them. The cases here recorded cannot claim to teach us much about that common disorder of which we think we know so much but of which we really know so little, syphilis. They may be worthy of record as showing some of its vagaries, and also as a reiteration of the need of care in diagnosis. But I claim the apology that syphilis is not a common disorder—in a country practice it is rare. My average is hardly more than a case per annum, and it will be noticed that the three cases here recorded were really imported cases.

The first case was that of a young lady *æt.* 19, who came to me about a lump on her arm which had been swelling steadily for two or three weeks. This lump, which was on her right ulna, just above the wrist, was an ugly, purplish, highly-inflamed swelling about the size of a flattened bantam's egg, involving the bone, and apparently about to break down, and yet not painful, and hardly tender—in fact, a typical gumma. The mere idea of such seemed absurd on the face of it in such a person of such a family. She was a big, strong girl, the eldest of five strapping, well-built children of a rather strikingly handsome couple, socially of the first water of the district. However, in the course of the examination, I noticed her breath was *ozænatous*, and her skin very muddy, and I learnt that during the previous five years, many similar lumps had arisen in different parts of her limbs, burst, and discharged as running sores; that she had been eight times under chloroform for operations upon these various sores, and that on one of these occasions amputation of a leg had been advised by two of the doctors present, but had not been agreed to by the third. The scars of these old sores and wounds showed that they had all affected the

bone, but beyond that were of no assistance to the diagnosis. The teeth were carious, the eyes clear, and the fauces clean.

A thorough life history of the case was necessary, and this I presently got from the mother. The patient was born in India, and was the second child—the first being a premature which lived three months. She was breast fed by the mother for two or three weeks, when, the mother getting "fever," she was wet-nursed by a native woman for three months. From her birth, "she apparently had difficulty in breathing fully through her nose when sucking, for she used to let go the breast every now and then and gasp for breath with her mouth open." When four months old, she had "blood-poisoning" with "sores round the mouth and between the fingers." After this cleared up, all went well till she was thirteen years old, when abscesses occurred from time to time on her legs, arms or hands. For one of these, "a periosteal abscess of tibia," she was operated upon in Madras. She then came to Australia and the trouble continued as already stated. Such a case forced its own diagnosis. But there was still a doubt whether it might not have been acquired from the wet-nurse. This was a delicate point, as the parents had apparently no idea of the nature of the trouble beyond it being "bone disease." To clear this point I broached my diagnosis to the father, and asked for enlightenment. It was a great shock to him. But he manfully told me he had contracted a venereal sore with buboes, which suppurated and healed under treatment, ten years before his marriage. He was assured he was cured, and had had no further signs of any sort since. But before he married, to make sure, he consulted two doctors, who again assured him there was no danger. So much for the history. The diagnosis was confirmed by the healing of the gumma under medical treatment. And the last I heard of the patient was that she was well in every way except for the *ozæna*, and that it was very difficult to induce her to continue her treatment.

The second case was a simple matter of physical diagnosis. A young farmer, *æt.* 36, consulted me about a lump on his liver. He had been a bit of a globe-trotter, and frankly told me that he had had syphilis eight years before, for which he had been treated in London and pronounced cured. No after effects or reminders had come, but for the last 12 months or so he had been very bilious and "livery," and had to be very careful about his diet and drink, and he had just found out this lump on his liver. On examination the lump

was found just below the rib margin, was smoothly rounded, and apparently fluctuating. The liver was enlarged, and its margin was felt below the tumour. There was no pain or tenderness. Beyond the drawn, "livery," appearance of the face, no other sign of disease could be found. The further history was that for the last five years he had been knocking about Australia—mining, droving, jackarooing, and farming—in fact, getting what is known as "colonial experience." The question was—Is the tumour syphilitic or hydatid? I could not say. But as there was no urgency, and the patient was about to take a trip to England, I advised a course of anti-syphilitic treatment, and heard later that the tumour completely disappeared.

The third case was that of a big, strong, young man who had just returned from West Australia. He consulted me about a swelling of his right knee. While examining this, which was much swollen with fluid in the sac, and "boggy" round about, I noticed some suspicious looking spots on his leg, and on making a further examination I found the other knee in a similar but less marked state, and a fairly typical maculo-squamous rash all over his body. There was a soft ulcerating chancre on the corona, enlarged glands in each groin, and oedema of each leg. Temperature normal, but pulse 96, and respiration 24. And on examining the lungs, the base of the right lung gave all the signs of congestion.

Course.—During the next few days, the oedema increased to a general anasarca, both knee joints became tensely distended, the skin pitted readily on pressure all over the body, and the swelling became so great in the neck and lower part of the face that at one time breathing became very difficult. The temperature ranged between 100° F. and 102°, the pulse never above 96. No fluid could be found in abdominal or thoracic cavities, but the pneumonic signs increased in the lung. The urine solidified on heating.

Treatment.—The excretions were all forced, and patient was mercurialized to salivation—unintentionally—and on the 11th day, the dropsy had all gone, the lungs were clear, temperature normal, and the trouble was over, but patient was extremely pulled down, and it took him three weeks to convalesce. A course of treatment was then advised.

The Premier of Victoria has endorsed the recommendation of the Board of Public Health that two sites be set apart at different parts of the State as sanatoria for consumptives, and has asked the Board to report on suitable localities.

A CASE OF CÆSAREAN SECTION.

By James T. Mitchell, M.D., Ballarat.

CÆSAREAN section is still so comparatively rare an operation as to make every case worth recording. Wide divergence of opinion continues to exist among medical practitioners as to the advisability of the operation and nothing but the most extreme necessity will bring men to feel that the risk is justifiable. For this, of course, statistics are responsible. The rate of mortality has, undoubtedly, in the past been very high, as we would naturally expect it to be in an operation tried often as a last resort, and most frequently after hours of exhausting labour with or without manipulative assistance. Not only has the operation been performed upon women in this exhausted condition, but it has been undertaken by men who had not previously performed or even witnessed the operation. And further, the whole thing has frequently been hurriedly prepared for and undertaken at inconvenient hours with but imperfect aseptic precautions. The mortality of these unfavourable cases has naturally pulled down the average of successful results from those performed under more suitable conditions, and hence the public, as well as the medical profession, has looked askance at Cæsarean section. And yet, under suitable conditions, the death rate ought to be but very little higher than that in an ordinary laparotomy, unless Porro's operation be performed, which adds greatly to the risk of simple delivery. Zinke, in a late number of the *American Gynecologic and Obstetric Journal*, gives some figures which indicate that Cæsarean section ranks high as a means of saving life, provided that the time, place, and method be as carefully selected as they would for any other important operation. On collecting statistics from a large number of European and American authors he finds that the average mortality for the mother is 4 per cent. and for the child 13 per cent. When Porro's operation is undertaken, the mortality rises to 38 per cent. for the mother, and 22 per cent. for the child.

L.W., single, aged 34 years, primipara, an unhealthy cripple was admitted to the lying-in ward of the Ballarat Benevolent Asylum on November 11th, 1901, expecting to be confined in a week or ten days. She had, in the previous June, been an in-patient at the Ballarat Hospital under treatment for hip-joint disease, and had been examined under chloroform by Drs. Pincock and Scott, who found her pregnant, and the pelvis so contracted as to

with an indefinite enlargement of the area of detailed knowledge. Or perhaps one should rather say that there are very real limits to the utility of a mere increased acquaintance with new masses of detail of the most varied character. It is at least possible that the real capacity of the student and perhaps even the effectiveness of the practitioner is not really increased, but rather diminished, by the attempt to become master of all fields of medical knowledge. And it is an attempt which in these days must inevitably fail.

Can we then entertain the proposal to return to the less complicated conditions of medical study which prevailed prior to the more recent extensions of medical teaching? No one, surely, will be found to advocate any such reactionary course. To do so were to ignore the very real advance which modern developments after all do represent. We must beware of throwing out the baby along with the bath. It is entirely right and proper that the teaching of our medical schools should reflect in the fullest and widest sense the full development of all branches and departments of medical science and practice.

One sometimes encounters a proposal, though perhaps with less frequency than formerly, which aims at the economy of the time of the student of medicine by minimising the basis of his general scientific studies. Now, were the practice of the art of medicine merely a practical craft, carried on by the aid of systems of empirical rules, such a course, though even then regrettable in the interests of general scientific culture, might, under the pressure of circumstances, be perfectly justifiable. It is perhaps significant that the suggestion referred to is made less confidently and is less loudly echoed at the present time. For at no period in the history of medicine has the art and practice of medicine been seen so clearly and immediately to depend upon the application of the principles and methods of general scientific procedure as is the case at the present time. The principles, the methods, the facts, of Chemistry, Physics and Biology, not only constitute the foundations, but they take no small part in the superstructure, of the fabric of modern scientific medicine. More and more are the distinctively medical sciences realised as compounded of these three ingredients. What, for example, is the science of Physiology other than the practical application to the human organism of the data and the conceptions which these sciences afford? And the modern physician who is not saturated with the conceptions of Physiology is a mere empiric, the

representative of a decadent type. The goal of medical education will assuredly not be reached by the sacrifice of the basal elements of training, but by an even more thorough discipline and absorption in their radical and fertile truths.

Is there, then, no way by which we can extricate the student from his present and future embarrassment without sacrificing, on the one hand, the thoroughness of his foundation in scientific principles and methods, and, on the other, the high and the increasing organisation and specialisation of the teaching of medical science and practice in our medical schools, whilst still respecting the conditions of a curriculum of not immoderate length?

A practical solution of this most complex problem will, in the opinion of the present writer, be found in the gradual adoption of some system of elective studies within the limits of a broad curriculum rendered elastic by its operation. And, for the reassurance of the more timid amongst would-be educational reformers, it may be stated that such an attempt at a solution is by no means in the air, but is actually in operation in English-speaking medical schools of the highest repute, such as the University of Harvard and the Johns Hopkins University of Baltimore.

The general nature of the system may be partially gathered from the following reference to it in the words of Professor C. S. Minot of Harvard:—"The required (i.e. the compulsory) studies in medicine should be reduced to the minimum, and numerous electives provided for every year of study. These proposed electives may be in subjects already taught, and may also provide courses not usually offered, such, for example, as examination of the blood, pathological chemistry, and psychology in its medical aspects. The elective system is the educational answer to the tendency toward specialisation in practice, and I believe that we have no choice as to its adoption."

It is as well to guard at the outset against certain misconceptions which the casual reader is liable to form of such a scheme. Any elective system certainly does mean specialisation within the limits of the student curriculum; but it does not mean that such specialisation should be allowed to cut into the broad and deep basis of general medical training which experience and medical educational authorities must lay down as a minimum standard of all-round attainment. What is claimed is (1) that we are now already actually insisting, and tending more and more to insist on, a specialisation on certain lines, considerably in advance of a

reasonable standard of merely general knowledge and attainment; (2) that every individual student without exception is compelled to follow exactly the same lines of this more specialised medical study, without regard to his tendencies, capacities, and inclinations; and (3) that, on the present lines of advance, if we add to the resources and effectiveness of a medical school by introducing the teaching of a new branch or sub-department, such an addition remains practically barren of result, and its introduction futile, until, or unless it is made a compulsory subject of study and examination. With an already over-full curriculum it is not to be expected that the individual student will choose an additional branch of special study, however attractive it may be to him individually, so long as its choice has no effect in relieving him from the necessity of following up several other branches which are just as much specialties, but which already have a place in the compulsory list of subjects. It need hardly be said that under the term specialties are included those which are purely scientific as well as the specialised sub-departments of practical or professional importance.

It must soon be recognised, if it is not already recognised, that we simply cannot go on attempting to make every one of our students scientific neurologists, thorough histologists, physiological chemists, experimental physiologists, pharmacologists, pathological histologists, expert bacteriologists, ophthalmic surgeons, experts in psychological medicine, public health specialists, as well as sound and well-trained practitioners of general medicine, surgery, and midwifery. But it is perfectly practicable, and also highly desirable, that each graduate should, in addition to having received a sound and thorough grounding in the general and indispensable subjects of medical training, have devoted special attention to, and have so far mastered, a certain number of the above-mentioned specialised branches. The list of these might, indeed, with advantage, be considerably amplified by the inclusion, for example, of pathological chemistry, diseases of children, skin diseases, diseases of the ear, throat, and nose, and no doubt a number of other subjects. So far as the writer can see, there is, for example, no very substantial reason why either ophthalmic or psychological medicine should be compulsory in preference to several other branches. The teaching of what may be termed *emergency* work in both these departments might perfectly well be taught by the teachers of general medicine or surgery, as indeed was formerly the case. But it is highly

important that these subjects should continue to be taught up to a University standard as subjects of election, which, as such, would ever claim a considerable proportion of followers.

A slight consideration will suffice to satisfy one that an elective choice by the student, from year to year, of certain more specialised subjects or areas of study, in addition to the more general minimum work which must ever be compulsory, need not be a wholly arbitrary one. At the outset, indeed, his choice of special branches would be largely dictated by the student's bias. And the opportunity to indulge this personal bias in some direction would be a boon and an inspiration to many a student. In subsequent years the direction of election would be largely predetermined by that of previous years. One could easily map out various lines of special work from year to year which would be distinctly congruous, or at least parallel with one another; and thus a unity of development would be attained. There is no reason why recommendations as to such lines of work should not be made by the authorities, not as rigid regulations, but as a guide and assistance to the student.

One concrete example only of what is meant by the operation of the elective system may here be considered in detail, as an illustration of the manner in which such a system might be worked. In the teaching of anatomy, the anatomy of the central nervous system nowadays demands treatment in considerable detail. It is necessary and proper that the student should have the opportunity afforded of acquiring that detailed knowledge which, to the future physician, may be absolutely of as great importance as is the knowledge of the relations of the common carotid to the future surgeon. Yet it is simply not necessary that every student should be burdened with the heavy task of acquiring a detailed knowledge of all those nerve tracts and systems of neurones which it is needful to demonstrate in any adequate exposition of the anatomy of the central nervous system.

Again, whilst a sound and fairly accurate knowledge of regional anatomy must be acquired by every student, there is a degree or kind of knowledge of this subject which can only be reached by careful and prolonged study of series of frozen sections through the body, and which cannot properly be expected of the average student under present conditions. But if special attainment in either of these two special branches were to be accepted as an alternative, absolving from specialised knowledge in the other direction, there is no doubt that it would

of the third occipital nerve and under cover of the trapezius. Deeper down under cover of the complexus were found a series of larger blended fusiform swellings on the fibres of the so-called posterior cervical plexus. At the same level, but extending forward into the side of the neck, was a similar but larger tumour on the external branch of the posterior primary division of the fourth nerve.

The neuromata were comparatively easily shelled out of a distinct but thin and loosely adhering capsule, and were cut away from the entering and issuing nerve fibres.

After the operation I discovered an area of diminished sensibility on the right side of the head close to the middle line, extending from the occiput upwards.

In Fasciculus xi. of the new Sydenham Society's Atlas of Illustrations of Pathology is a series of plates of similar conditions of various nerves.

These tumours consist of fibrous tissue contained in the neurilemma, and their growth chiefly along the direction of the nerve fibres gives to them their usual fusiform shape.

FRED. J. T. SAWKINS, M.B., Ch. M., Syd. College St., Sydney.

Perforative Appendicitis.

At 6 p.m. I was called to see a woman who was said to be dying in agony. She was lying in bed on the right side, with the knees drawn up, groaning in pain, the face and lips were bluish and cold, the hands and feet were cold, and the whole body bathed in perspiration. Vomiting and retching were continual; it was very evident she could not live very long.

The patient at the time was too ill to give her own history; all that could be drawn from her was, that she had suffered previously from attacks of inflammation of the stomach, while her friends stated that she had had gastric ulcer.

There was a tender area over the region of the stomach, and a well marked transverse crease across the abdomen, which seemed to mark its lower border. There was also a tender area over the appendix, and the abdominal wall at that spot was slightly more rigid. Although a perforation into the abdominal cavity had certainly taken place, it was impossible to locate it. The available history, and the local conditions, pointed to the stomach first, and then to the appendix.

Although the woman was in a condition which would formerly have been called dying, she was immediately operated upon. The loca-

tion of the lesion being doubtful, the usual incision in the middle line was made. The small intestine, where seen, was very red and dull, there was no lymph to be seen, but this condition of redness decreased upwards and increased downwards until the region of the appendix was reached, when some flakes of lymph appeared, and a faecal smell was noticed. The caecum was firmly bound down, and out of reach. An incision was therefore made at right angles to the original one into the iliac fossa. The appendix was then easily found, separated, and removed. At the junction with the caecum was a small perforation, through which faecal matter was escaping. During the operation the abdominal cavity was continually flushed with hot saline solution. This treatment entirely altered the condition of the patient. The collapse was much lessened, and her condition during the course of the operation was far better than before it was begun. The wound was drained; at the end of three days some faeces appeared in the wound. This soon disappeared, and the sinus closed without further trouble. She is now quite well.

My opinion is daily confirmed that these cases should never be abandoned, and are never to be despaired of.

FRANK TRATMAN, M.D. LOND.,
Senior Surgeon, Perth Public Hospital.
Perth, W.A.

The Undulatory Impulse of Pericardial Effusion.

In the article by Dr. Roberts on "Pericarditis" in Allbutt's "System of Medicine," the following paragraph occurs (Vol. V., p. 762):—"It is a disputed question whether pericardial effusion can produce any definite change in the character of the cardiac movements, tactile or visible. Certainly the impulse observed over the upper part of the chest may be more or less undulatory; and a wave-like motion has been described, which can be seen, but not felt, and is supposed to be communicated to the fluid by the action of the heart. I must say that I have never been able to recognise this phenomenon positively. Some authorities regard an undulatory impulse as a sign, not in favour of pericardial effusion, but against it." Recently a case presented itself at the Prince Alfred Hospital, which throws considerable light on this point. The patient was a boy, about fourteen years old, suffering severe cardiac embarrassment. The area of pericardial dullness was much increased, and towards the lower part,

with each heart beat could be both seen and felt a diffuse impulse, which at once conveyed, by its undulatory character to the sight and touch the idea of an organ vigorously moving and displacing fluid, much in the same way as the walls of a tank and the surface of the water in an aquarium are disturbed by the submerged gambols of some large marine animal, such as a seal. A needle was inserted, but failed to withdraw fluid. Sudden death terminated the case. At the *post-mortem*, the pericardial sac was found quite lax, so that it could be easily seized with the fingers, and yet it contained 22oz. of straw-coloured fluid, and surrounded a greatly hypertrophied heart. There was some old peri- and endocarditis, and the usual results of backward pressure. Now, in an ordinary case of pericardial effusion, the sac is tensely filled with fluid, and stretched to nearly its utmost capacity, its shape being such as will yield the greater cubic contents. The contraction of the heart can thus alter but little the position of the fluid, merely increasing the already high pressure by altering the cubic capacity without changing to any extent the position of the particles. Now if, as in the case cited, part of the fluid has been re-absorbed, but owing to stretching, the elasticity of the sac has been lost, and it does not accompany the absorption by contraction, then the remaining fluid tends to collect in the various pouches and dependent positions, and with the different movements is hurried from one corner to another with a consequent undulatory motion. In just the same way, an extremely tense cyst feels to palpation like a solid tumour, while in a laxer one fluctuation is easily detected. Probably in most cases of effusion, as the fluid is absorbed or removed by aspiration, the stretched pericardium is still resilient enough to contract *pari passu*, and it is only in occasional cases, such as the above that this very marked phenomenon appears. The failure of the exploratory needle to reveal fluid is easily explained by supposing it to have entered the collapsed portion of the partially distended sac.

J. BURTON CLELAND, M.B., CH.M. SYD.,
Resident Pathologist, Prince Alfred Hospital.

At a recent meeting of the Vienna Society of Surgeons a demonstration was given of a new apparatus for sewing up a wound after an operation. The verdict on it was that it was swift, easy to handle and reliable. The aseptic state of the wounds after its use is better maintained than heretofore. The essential feature of the apparatus is that the wound is not actually sewn up, but is held together by means of minute clamps.

MIRROR OF HOSPITAL PRACTICE IN AUSTRALASIA.

ADELAIDE HOSPITAL, S.A.

COMPOUND FRACTURE OF SKULL—NO LOSS OF
CONSCIOUSNESS—PARALYSIS OF LEFT SIDE
—TREPHINING—RECOVERY.

(Under the Care of LEONARD W. BICKLE,
F.R.C.S.E., Hon. Surgeon.)

ON August 8th, 1901, the patient, a man, aged 21 years, was larking with a brother, and in a dispute which arose the brother picked up a piece of road metal and threw it at the patient, striking him on the head. The wound bled freely, and a doctor was sent for. It was late in the evening, and as the room was badly lighted examination was very difficult and unsatisfactory. There were no symptoms of concussion or compression, and the case was treated as a scalp wound. On the 9th and 10th, patient was very well. On the 11th, in the afternoon, about 4 p.m., he felt giddy, and his left leg was weak. On the 12th, Dr. H. Russell was sent for, as the man seemed worse, being drowsy, and the left arm as well as the left leg paralysed. Immediate removal to the hospital was advised. The patient remembers distinctly all details, and that the jolting of the ambulance made his headache. He was admitted into the Victoria ward of the Adelaide Hospital under my care.

State on Admission.—On seeing the patient shortly after admission he was found to be in a very drowsy condition from which he could be roused with considerable difficulty. His answers were, however, rational. The breathing was slow and laboured; the pulse about 46, full; the pupils unequal; the left being widely dilated. There was complete paralysis of the left arm and left leg. On examining the head a small scalp wound about 1½ inches long was found on the right side, the edges glued together, a little sero-purulent fluid coming from anterior end on pressure. On separating the edges the finger came upon a well-marked fracture with a portion of the outer table, about half-an-inch in length and a quarter-inch at widest part missing. Immediate trephining was decided on.

Operation.—A curved flap with its convexity downwards was raised, having the wound about its centre. On exposing the skull it was found to be extensively fractured, with brain matter exuding. A large trephine was used and a crown of bone removed. The inner table was

fractured, and the splinters driven into the brain substance. There was a small clot of blood between skull and brain. The dura mater was torn. The portion of the missing outer table was found deeper in the brain, having been driven past the inner table. The brain was extensively lacerated and softened, the fore-finger passing in to its full length without least resistance. The softening extended to the ventricle, as there was a free escape of cerebro-spinal fluid when finger was withdrawn. Douching with boracic acid solution was carried out, the flap sutured, the edges of scalp wound cleaned, and a gauze drain inserted through it.

August 13th.—Patient very quiet and comfortable, no pain, quite intelligent.

August 16th.—Progress satisfactory, temperature normal, some movement in leg.

August 19th.—Doing well, wound clean, flap united by first intention, drain left out.

August 23rd.—Good deal of pain, some bagging, and pus escaped from wound when opened by probe, small tube inserted.

August 26th.—Some indications of hernia cerebri. Graduated pressure by compresses boracic acid, formalin, and itrol (1-1000) was tried, and also free use of nitrate of silver stick.



September 10th.—Despite all treatment hernia has increased rapidly. Under chloroform the hernia was shaved off, and a silver plate, with perforations in centre, was placed over trephine wound.

September 18th.—Patient doing well, except that plate was showing at one place where edge (although carefully bevelled) had ulcerated through. Edge trimmed under chloroform.

October 5th.—Plate still troublesome. The trephine wound has cicatrised, so plate was removed under chloroform. There has been no post-anæsthetic sickness on any occasion.

By this time the leg had so far recovered that he could get about with a stick; but the arm

remained helpless. A few days later he found he could move the arm from the shoulder. Ten days later he found that if he tried to close the fingers of left hand he could not do so, but if he shut the right hand at same time the left would close too. It was interesting to watch the progress of recovery of the movements of fingers. They can now be moved by themselves.

When seen on *January 3rd, 1902*, he could walk freely without a stick, with just a slight drag of the leg; the left arm can be moved in all directions from the shoulder and elbow; the finger can be closed at will, but the full grasp of the hand has not yet returned. He looks well, has no headache, and his intellect is as good as ever.

Remarks.—The position of the hernia as seen in the illustration (from photo by author) will serve better than any description to locate the injury. The case is of marked interest in location of brain centres, and it is not a little remarkable that so serious an injury should have been unaccompanied by loss of consciousness, and that the onset of symptoms should have been so gradual.

HOSPITAL FOR SICK CHILDREN, SYDNEY.

A PECULIAR CASE OF PERITONITIS.

(Under the care of Mr. C. P. B. CLUBBE).

Reported by REGINALD DAVIES, M.B., CH.M.,
House Surgeon.

H.G., 7 years of age, was admitted to the Children's Hospital under Mr. Clubbe on January 4th, 1902.

History of illness.—The patient was suddenly attacked about six days ago with vomiting and diarrhœa which continued almost incessantly for three days. The attack was supposed to have been due to the eating of a "shop-made" meat pie. Three days after the onset of the illness the diarrhœa suddenly stopped and since then the child has passed no motion, but the vomiting has continued, and all food is rejected. Child is complaining of pain in stomach, most marked in region of the umbilicus.

On examination.—Child lying with both legs flexed on abdomen. Face very drawn. Temperature 101·8°, pulse 128, respiration 36.

Abdomen.—Distended and tympanitic in upper part. In left iliac fossa there is dulness. No marked tenderness over McBurney's point, nor any dulness in that region. Per rectum no mass to be felt.

Operation.—The abdomen was opened in middle line almost immediately. The appendix was searched for and found healthy. The intestines were found to be matted together by thick purulent lymph, but there was no smell from abdomen. In the left iliac fossa were found numerous coils of small intestine—collapsed—which had evidently given the dull note on percussion over that region. The coils of intestine were brought to the surface, examined carefully, and the purulent lymph removed. In this manner the whole length of the intestine was examined, and found to contain no lesion until the upper portion of the jejunum was reached. It was then seen that, corresponding with the length of collapsed bowel, the mesenteric veins were thrombosed in several places. There were about four thrombosed veins to be seen; the area of thrombosis being about an inch and a half long and about half an inch wide. The thrombosis of the mesenteric veins was apparently the cause of the collapse of the bowel. The abdominal wound was closed after insertion of a glass drainage tube. The child gradually sank, and died in 36 hours' time.

No *post-mortem* was allowed, but was hardly necessary, as such a thorough examination was made during the operation.

REVIEWS AND NOTICES OF BOOKS.

STUDIES IN HETEROGENESIS. By H. Charlton Bastian, M.A., M.D., F.R.S. Lond. Kmeritus Professor of the Principles and Practice of Medicine and of Clinical Medicine in University College, London; Consulting Physician to University College Hospital; and Senior Physician to the National Hospital for the Paralyzed and Epileptic. Part First. With 210 illustrations from photomicrographs. Williams and Norgate, London, 1901.

In this memoir, Dr. Bastian returns to a subject upon which, as he tells us, he has been silent for twenty-nine years. He again enters vigorously upon a defence of the position he took up in his work on the "Beginnings of Life," published in 1872, and we cannot but admire the keen scientific spirit in which the veteran physician again tackles the problem of heterogenesis. In his leisure hours he has been making observations upon the life history of some of the low forms of vegetable life, such as the *confervæ*, *euglenæ*, *spirogyra*, etc., and tells how from these vegetable forms he has seen emerge *amoebæ* and other low forms of animal life. He has studied photomicrography specially that he might be able to present a clear and unbiased account of what has happened under his own observations, and what, as he says, anyone who takes the trouble can verify for himself. At the end of the work are appended over 200 reproductions from photomicrographs taken by the author himself, and which well illustrate the text. In conclusion, Dr.

Bastian points out how the doctrine of heterogenesis will explain many of the difficulties which have long been apparent in the doctrine of evolution, and which were well known and recognised by Darwin himself; and how this will explain the persistence of the low forms of animal life, without assuming that they have persisted undeveloped through countless ages, and in all parts of the world. While the appearances described and figured by Dr. Bastian may possibly admit of another interpretation, one cannot but respect the opinion of so able and scientific a worker, and all who appreciate the motto "*audi alteram partem*," will much enjoy the perusal of this contribution to a most interesting subject. G.E.R.

MATIERE MEDICALE ZOOLOGIQUE, HISTOIRE DES DROGUES D'ORIGINE ANIMALE, par H. Beauregard, Professeur à l'Ecole Supérieure de Pharmacie de Paris, etc., Révisé par M. Contière, Professeur agrégé chargé de Cours à l'Ecole de Pharmacie. Avec préface de M. D'Arsonval, Professeur au Collège de France. Paris: C. Naud, Editeur, 3 Rue Racine, 1901.

In order to understand the nature of this work, we may premise that the author was by profession a zoologist, and, becoming attached as professor to the Superior School of Pharmacy at Paris, naturally was led to survey the natural history of animals from the stand-point of the pharmacist.

Hence, while his object in this treatise is "to give the history of the animals, and drugs of animal origin used in therapeutics," there are certain points in which the result greatly differs from most of its predecessors. The latter usually have been simple collations, or have contained zoological descriptions of so very comprehensive and detailed a nature, as to consist of material of no use to the pharmacist who might be seeking information about objects of special interest to himself.

The author, in well-chosen, clear language, gives only such general information as regards classification, anatomy and physiology as will enable any one with very moderate preliminary knowledge to follow him in the detailed descriptions of the special objects which subsequently are referred to.

By avoiding over-elaboration in general matters, he has been able to give very full and interesting information upon many points hitherto misunderstood, or not known. Much of the work, indeed, is composed of the results of years of original investigation, which have been published in comparatively inaccessible forms.

This leads to a certain lack of proportion, which in the case of a mere text-book would be undesirable, but in a treatise of this nature is more than pardonable, being counterbalanced by the valuable information thus for the first time made easy of access. Particularly interesting are the articles treating of the *cachalot*, vesicating insects, and the genito-urinary glands of the mammals. It is not likely that medical practitioners will be extensive patrons of such a work, but to the pharmacist it must prove of the greatest interest.

The large number of illustrations, many of which are in colours, enable the reader to follow the text with great ease. The price of the work is very moderate in view of its contents, and the satisfactory form in which it has been issued.

A melancholy interest attaches to this publication, for the author died before its issue, and it was therefore left to others to take his place, their kindly expressions of love and respect being incorporated in the form of a graceful prelude. T.S.D.

THE AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, 20TH FEBRUARY, 1902.

MEDICAL EDUCATION IN AUSTRALASIA.

THOSE who have read the discussions which have taken place in recent years at the meetings of the General Medical Council in London, on the question of medical education and the medical curriculum will know what a difference of opinion exists on this subject; and a review of the curricula at the different medical schools in Australasia, which we present to our readers in this issue, will confirm this statement so far as this part of the world is concerned. While we are all agreed that at least five years of study is necessary to enable the student to acquire a knowledge of the fundamentals of medicine, there is much difference of opinion as to how those five years can be spent to the best advantage. With the great increase in the last few years in our knowledge of the preliminary sciences, such as biology, anatomy, and physiology, greater demand is made upon the student's time in acquiring a knowledge of those subjects sufficiently extensive to be of service to him in his later studies of practical medicine and surgery. But a longer time spent in preliminary scientific study must of necessity cut short the time for hospital and practical work, and the difficulty is to arrive at a fair adjustment of the work of the different years of the curriculum which will enable the average student to acquire a knowledge of his professional work, not only sufficient to satisfy the examiners, but what is of more importance, to fit him to carry on his studies after he has left his school, and to practise his profession with credit to himself, and benefit to his patients.

The exact period in the curriculum when students should begin hospital work varies in different schools. In Sydney, for example, students do not seriously enter upon hospital work until the beginning of their fourth year, while in Melbourne they are required to attend the surgical department of the hospital in their second year. There is something to be said in favour of both of these regulations. If, during the first three years students acquire all the preliminary knowledge, and are free in their last two years from attending a number of courses of systematic lectures, and able to spend practically the whole day in the wards and out-patients' rooms, then we think no better system could be adopted. For the students then enters upon their strictly professional work, well grounded and fitted to make practical use of their knowledge of the fundamental sciences. But unfortunately, at present, during the fourth and fifth years the students are burdened with attendance on systematic lectures, demonstrations, etc., which cut largely into their time for work in the wards and out-patient departments, and they are expected to acquire a knowledge of the principles and practice of medicine in the course of nine or ten months in the last year of their career, and are expected to pass the final examination not only in the general subjects of medicine, surgery, obstetrics, and gynaecology, but also in some special subjects, as psychological medicine, ophthalmology, and public health.

If, however, students enter upon hospital attendance during their second year of study, they are early in the course introduced to the practical subjects of their professional work; but at the same time it is impossible for them to seriously profit by hospital attendance if they are ignorant of the essentials of anatomy and physiology; and the time spent in hospital attendance at this early period of their career would more profitably be spent in acquiring a sound, practical knowledge of anatomy and

physiology. But there is much to be said in favour of attendance in the surgical department of the hospital, with tutorial instruction in surgery in the third year, and the commencement of the study of medicine in the fourth year. At present, this appears to us to be the best adjustment of the work of the curriculum.

The able paper by Professor Wilson of the Sydney University, which we publish in another column, on the Medical Curriculum, is the result of much thought and practical acquaintance with this subject, and his suggestions on the principle of specialising by the student in the course of his career are well worth serious consideration.

THE FEE FOR MEDICAL EXAMINATION FOR LIFE INSURANCE.

We understand the Australian Mutual Provident Society desire to reduce the fee for medical examination for life insurance in all cases under £250 to half a guinea. It is said that this Society has now to pay such large sums by way of commission to induce the assuring public to enter its doors that it can only make a reasonable profit by cutting down the doctors' fees. Whether the profits which this Society has been declaring of late in the shape of bonus can be fairly described as reasonable is a question; from the flourish of trumpets which usually accompanies the annual report of the Australian Mutual Provident Society, a dispassionate observer would probably characterise the profits as very large, but whether they be very large or only reasonable, we feel quite sure that not a single person who is assured in the Australian Mutual Provident Society would desire that his bonus should be kept up to an unjust figure by sweating the profession of medicine. That this proposal is neither more nor less than sweating in the worst form is obvious to everyone. An extremely wealthy

society which boasts of its accumulated millions finds a difficulty in keeping up its bonuses at an inflated figure. Instead of attempting to reduce its expenses in other directions, the General Manager hopes to squeeze needy practitioners of medicine, and compel them to accept just one half what the universal custom of Australia has declared a just and fair remuneration. It seems by this process of squeezing or sweating, the Australian Mutual Provident Society hopes to make a profit of between a thousand and fifteen hundred pounds a year. It is certainly a confession of weakness that this society so long supposed to be great and flourishing should be compelled in order to keep up its rate of profit to scrape together £1,500 by taking toll of the modest earnings of the profession of medicine. But the author of this proposal has reckoned without his host. We can assure him that he will not find the profession of medicine that cohesionless body which he imagines us to be. We shall resist his unworthy attempt to sweat us, and the public will be greatly edified by the spectacle of a great and wealthy society endeavouring to obtain skilled services for half their real value.

THE MONTH.

The A.N.A. and the British Medical Association.

"The Australian Natives' Association Board has decided to agree to the terms of the British Medical Association fixing the wage limit for benefit members at £200 per annum. This will solve the difficulty in regard to the appointment of a medical officer for the branch which has been experienced since its establishment."

The above appeared in the *Sydney Evening News* of the 7th instant. We wish to point out that the last portion of the paragraph is, to say the least, premature and possibly misleading. The fact is that the whole question as to whether, under any circumstances, relations with the Australian Natives' Association would be deemed desirable, is referred to a general meeting of the New South Wales Branch of

the British Medical Association, to be held on March 7th. In the meantime, the position as between the Australian Natives' Association and the British Medical Association remains unaltered; and we would warn members of the British Medical Association against allowing themselves to be appointed Medical Officers of the Association without their consent, as has already been done in some instances. Such unwarranted appointments should be at once repudiated.

In this issue we have endeavoured as far as our space would allow, to give a concise account of the medical curricula at the different Australasian medical schools. We have tried to secure the latest information on this subject, but owing to some changes in the curriculum pending at some of the schools, the statements given must be understood as being at present approximately accurate. The comparisons thus afforded between the different medical schools will furnish information to students about to enter on the study of medicine, and will also be of some interest to those who are concerned in the question of medical education in these lands.

The Adelaide University Medical School.

It must be a source of considerable satisfaction to the authorities of the Adelaide University, and also to the students of the faculty of medicine, that after the past few years of trouble at the Adelaide Hospital, peace has been restored, and medical students are again able to complete their full course in Adelaide. For some years past students have only been able to obtain their first three years instruction in Adelaide, and have been obliged to migrate to Melbourne or Sydney to complete their course. The revival of the medical school was playfully represented by the students during their part of the proceedings preliminary to the official function at the annual commemoration at the University in December last.

The Resident Appointments at the Adelaide Hospital.

The Board of Management at the Adelaide Hospital have recently elected four lady medical graduates and one gentleman to fill the posts of resident medical officers. We believe this proportion of ladies to gentlemen on the resident staff of a large general hospital to be unprecedented. The position of affairs is

interesting in the light of the present crisis at the infirmary at Macclesfield in England, where a lady house surgeon was appointed contrary to the expressed wishes of the honorary visiting staff, and the latter have consequently resigned in a body. Some interesting correspondence on the subject has appeared in the *Lancet*, and it would appear that there is some personal feeling against the lady in question. Still there can be no doubt of the truth of some of the statements made in this correspondence, and that it is hardly decent to compel a respectable man to submit to catheterisation by a lady house-surgeon; and on the other hand, the constant direct contact with cases of disease and injury of the genital organs must tend to deaden that sense of refinement and delicacy, which is essential to a woman's character. The directors of the large metropolitan hospitals in Sydney have, in the past, consistently refused to elect lady graduates to the posts of resident medical officer, and we believe that the authorities of the Sydney Children's Hospital are also averse to such appointments. However, at the Coast Hospital, the senior resident medical officer is a lady, and she has been in residence at this hospital for three years, and has given every satisfaction to all in the discharge of her duties.

Reception House for the Insane, Melbourne.

The necessity for the establishment of a reception house in connection with the hospitals for the insane in Melbourne has been impressed upon the authorities, and a site at the Royal Park reserve has been suggested for this institution. It is elevated, picturesque, and healthy, not too near any residences, and has been inspected and approved by the Chief Secretary and Dr. McCreery. It has also been suggested that some provision should be made for paying patients, either in a special asylum, or in special wards.

The Fear of Tuberculosis.

The large amount of attention which has been directed to the dangers of infection from tuberculosis in the public newspapers, while having a beneficial effect on the spread of the disease, has unfortunately brought disabilities on the heads of the poor consumptives. Boarding houses object to take in persons suffering from pulmonary phthisis. This fear of taking infection from phthisical patients has, we understand, extended to the trained nurses, and the Committee of the Queen Victoria Home for Consumptives at Thirlmere are at present

experiencing great difficulty in securing the services of trained nurses for this institution. The reason for this is, we are informed, the fear of taking the infection. This is a matter to be regretted, and by way of re-assurance, we may remind the trained nurses that amongst the large number of nurses and resident medical officers at Brompton Hospital for Consumption in London, no case of infection has ever occurred. In the present day with our knowledge of the risk and of the proper precautions to be taken, there is not the slightest danger of a nurse who understands her duties contracting the disease, and we hope that this re-assurance will have the effect of removing the difficulty which now besets the authorities at Thirlmere in securing a satisfactory nursing staff for their institution which is, at the present time the only public institution of its kind in this State.

Abolition of Compulsory Vaccination in South Australia.

The Act to abolish compulsory vaccination was passed by Parliament last session and is now in force. Clause 1 of the statute provides that no parent or other person shall be liable to a penalty if within six months from the birth of the child he makes a declaration before a justice of the peace that he conscientiously believes that vaccination would be prejudicial to the health of the child, and within seven days thereafter delivers to the vaccination officer such declaration. It is to be regretted that such an Act should have been passed, in view of the serious outbreak of smallpox in London.

Victorian Association for the Prevention and Cure of Tuberculosis.

The committee of the Victorian Association for the Prevention and Cure of Tuberculosis held its first meeting at the Town Hall, Melbourne, on January 27th last. Dr. Jamieson occupied the chair, and stated the objects of the Association and the work of its committee. An executive committee of 20 members was then appointed. Mr. F. R. Godfrey, president of the Melbourne Hospital, was appointed treasurer, and Dr. Daish agreed to continue to act as hon. secretary. It was decided to make the member's subscriptions 5s. per annum, with the view of obtaining a large enrolment, and proportionate increase of personal interest.

The next Annual Meeting of the subscribers to the Children's Hospital, Sydney, is to be held in the Town Hall, on the evening of February 27th. The Mayor will preside. Musical selections will be given, and a display of physical drill by some of the public school children.

THE FIGHT AGAINST TUBERCULOSIS IN AUSTRALASIA.

IV.

Victoria.

IN the war waged against tuberculosis in Victoria a strong frontal attack against an enemy, entrenched behind barriers of ignorance and so strongly supported by prejudice, has hitherto been deemed inexpedient by those charged with the care of the public health, it being realised that a heavy and long-continued educational bombardment must precede any successful general advance. Still, there have been affairs of outposts and flank attacks whereby advantages have been gained, and the enemy's position weakened, and the appearances promise that the psychological moment will arrive in the near future when a vigorous, aggressive movement may be looked for against this most deadly, but yet, if met with all available weapons after proper reconnaissance, most vulnerable of foes to human life. The recorded death rate from the disease in all its forms had not till recent years shown any marked improvement, but a downward tendency was noticeable about the middle of the penultimate decade, and it has now reached a lower level than before recorded. The accompanying chart, copied with revision to date from a valuable report on tuberculosis by Dr. Gresswell, Medical Inspector, and now also Permanent Head of the Public Health Department of this State, shows clearly the gradual fall since 1887. The most marked decrease has been in the metropolitan area, and this was to be expected if sanitary activity might be credited with being a contributing cause to the improvement; for sanitary progress is proverbially slower in more sparsely populated areas, and the tendency is for the increased sanitary vigilance exercised in large centres of population to approximate the death rate to that of corresponding country districts. The specially marked decrease in the phthisis mortality* is what might be reasonably anticipated if the modern outlook on the disease is rational, and the efforts of the Public Health authorities chiefly extend in the direction of providing an environment in which pure air, clean soil, freely sunlit streets and buildings, and wholesome meat and milk supplies are leading factors. Apart from efforts directed to the education of public opinion, and especially

* It must be remembered, however, with reference to the phthisis mortality that there has been a somewhat compensating upward tendency of the recorded death rate from other forms of respiratory diseases during the same period.

of those concerned in local government, it has been on these lines that the energies of the Public Health authorities in this State, have mainly been expended.

To deal now with some of the individual measures employed in this combat, and considering first the powers arising from existing law, it may be noted that the only direct references to tuberculosis in the Health Act, 1890, concern the sale of the milk or meat of tuberculous animals. In the attempt to safeguard milk supply, inspections of dairy premises have been and are still being carried out, and extensive applications of the tuberculin test have been made by Mr. Cameron, the Veterinary Inspector of the Board of Health, with a view to the elimination of diseased stock from dairy herds. Tuberculous cattle have also been destroyed in considerable numbers for many years past by inspectors under the Stock Act. Circulars of advice, and more recently a pamphlet prepared by Mr. Cameron, have been issued by the Board to dairymen, still the industry cannot be said to be conducted in anything approaching a satisfactory manner, owing to the very imperfect control frequently exercised by municipal councils, which constitute the local sanitary authority under the Health Act, and very few councils have, up to the present, appointed veterinary inspectors, dairy inspection being often but one of the duties of an officer, whose functions are as multifarious as those of Pooh Bah, of operatic fame.

Legislation, with the object of further safeguarding the production and storage of milk, may be expected shortly, and will probably be along the lines of the recently introduced Meat Supervision Act, which requires that all meat intended for human consumption shall be inspected and adjudged free from tubercle or other communicable disease, and otherwise sound by a municipal officer, whose qualifications have been approved of by the Board of Health. This Act at present applies only to the metropolis, but its extension to other large centres can only be a matter of a short time.

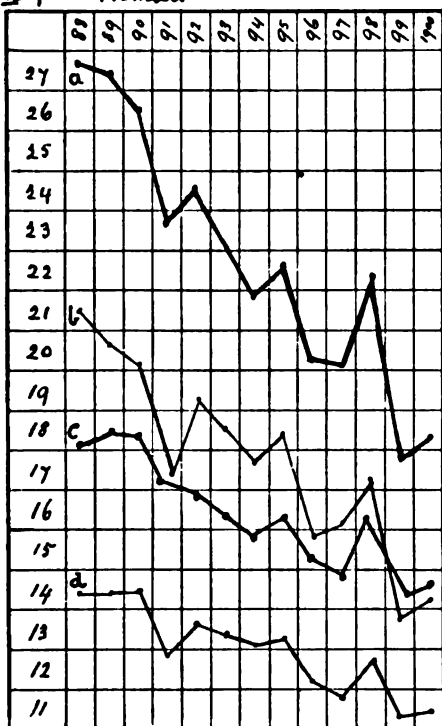
In 1893, the report on tuberculosis, prepared by Dr. Gresswell and already referred to, was published by the Board, and has since passed through six editions, and has been widely distributed throughout the State. This report deals succinctly with the nature of the disease and its incidence, and detailed directions are given of the lines along which preventive measures should proceed. In addition, municipal councils have been urged by the Board to invite information of the occurrence

of the disease and of the deaths therefrom from ratepayers and district registrars, and to undertake the disinfection of infected premises. In 1900, the city of Melbourne, as became the premier municipality of the State, took action somewhat on the lines suggested by the Board. Local registrars now report all deaths from phthisis to the Council, whereupon the sanitary inspector visits the premises and supervises a thorough cleansing and disinfection. The homes of phthisical persons attending the out-patient department of metropolitan hospitals are also visited, and householders advised as to the necessity of adopting precautionary measures against infection. It has not been found practicable to exercise direct control over private premises except to a very limited extent, and constant activity on the part of health officers and sanitary inspectors is required if those conditions in the home which favour the incidence of tuberculosis are to be overcome. More, however, has been done by the central health authorities with regard to public buildings, and great improvements have been and are still being effected in these in the direction of ventilation, sunlighting, and the prevention of over-crowding. The operations of the Factory Act also tend to improvement along somewhat similar lines.

In the matter of direct attack against the disease, the powers conferred by the Health Act, except in the directions already indicated, are limited. Thus an amendment of the Act is necessary before the nuisance arising from indiscriminate expectoration in public places can be effectively dealt with. It may be mentioned that for some years past the gratuitous examination of suspected sputum has been undertaken for medical practitioners by the Board of Health. The great sign of a new departure in the campaign was the definition of pulmonary tuberculosis as a "dangerous infectious or contagious disease" which appeared in the *Government Gazette* of August, 1901. Such a definition opens the door to the compulsory notification of this form of the disease, a step which, while calling for due circumspection, will yet, if carried out with judicious discrimination, prove a most valuable weapon of defence. But the effect of this definition reaches still further, as it renders many sections of the Health Act of 1890, which have reference to preventive measures in cases of infectious diseases potentially operative; some of these sections it will probably be found inexpedient, and indeed, unnecessary to enforce, but others, it may be expected, will be brought into active operation in the near future. Thus,

persons affected with phthisis may be removed from a common lodging-house, or indeed from any premises compulsorily to a hospital if such removal is legally certified to as necessary in the interests of the public health. Again, the letting of rooms or premises previously tenanted by phthisical patients may now be placed under safe-guarding restrictions, and the application of this provision to hotels in consumptive resorts, such as the northern towns of this State, will lessen a distinct danger to the health of the travelling public.

Death rates per 10000 population in Victoria (a from all tubercular disease b from Phthisis) and in Melbourne and Suburbs (c from all tubercular disease d from Phthisis)



Travellers by train or ship-board affected with the disease may also be required to give notice of the fact. With regard to provision for the treatment of those afflicted with tuberculosis, in addition to the many cases of all forms of the disease which are received at the general hospitals throughout the State, special provision has been made in two directions. At the Austin Hospital for

Incurables a detached wing has been set apart for cases of advanced phthisis. There is accommodation for 40 patients, and during the past year about 80 patients have been admitted. Dr. Zwar, the resident physician, enforces the open-air treatment as far as possible, and the work is carried on reciprocally with that of the sanatorium (next to be referred to), cases which improve sufficiently being transferred to the latter, while other cases are received from the sanatorium. This sanatorium for consumptives is a public charity, which has been established about 12 years, patients are received on medical recommendation, and payment only required when circumstances warrant it. During the winter season patients are accommodated, to the number of 40, at Echuca, where the institution is in reality a consumptive home, as the premises are not self-contained, occupying an area of only one acre, and patients during the day wander about the public park and town; during the summer season patients reside at Macedon, where the premises are much more commodious, and the site elevated. Funds are at present being solicited for the purpose of extending the operations of this charity, and it is to be hoped that a more suitable and adequate site for the purpose than the existing premises at Echuca will be obtained.

In the education of the public to a true conception of the importance and nature of tuberculosis the efforts of the Press must not be forgotten, nor the untiring efforts of the Australian Health Society in a similar direction, and it may safely be said that the bulk of the community are now alive as never before to the dangers that may arise from want of care in dealing with this disease.

The medical profession has, through its members, done its share, and has organised two public meetings in the metropolis, the first in 1899, and the second quite recently, with a view to the formation of a Tubercle Prevention Society, and the bringing of the matter weightily before the public mind. The potential usefulness of such a society none can deny, working as it must by exercising steady and public pressure against prejudice, and by supporting those measures which are the logical outcome of the recognition of tuberculosis as an infectious disease, favoured, if not in part conditioned by debilitating environment and heredity—how often indeed by an inherited evil environment.

The amelioration of the conditions under which Labor lives and works, the raising of the standard of living and other kindred social

problems [are not merely political questions, they are of special interest and importance, to the profession, which, though so largely exploited by the public, yet heaps coals of fire on the public head by its efforts to remove those health-destroying conditions which are a large factor in the existence of the profession as an income earning body.

Prevention rather than cure is its highest motto, and in no direction can this battle-cry be raised with more hope of a successful issue than in the fight against tuberculosis.

THE AUSTRALASIAN SCHOOLS OF MEDICINE.

University of Melbourne.

In the Faculty in Medicine at the Melbourne University, four degrees are granted, Bachelor of Medicine, Bachelor of Surgery, Doctor of Medicine, and Master of Surgery.

No student can commence the course for these degrees unless he has matriculated, or can produce evidence that at some matriculation in the University of Melbourne, he has passed in Latin, English, Arithmetic, Algebra, and Geometry, and in one of the following optional subjects:—Greek, French, or German.

No student can obtain credit for any portion of the course for these degrees completed elsewhere without producing evidence of having passed examinations approved by the Professorial Board in the six subjects named.

Candidates admitted from another University must produce evidence of having passed examinations approved by the Professorial Board in the six subjects above named before being admitted to the first examination of the course for the degrees of Bachelor of Medicine and Bachelor of Surgery.

Degree of M.B., B.S. Candidates for the degrees of Bachelor of Medicine and Bachelor of Surgery must, subsequent to their matriculation, pursue their studies for five years and pass five examinations.

During the first year candidates must attend lectures on—

1. Natural philosophy.
2. Biology.
3. Chemistry.

And attend the laboratory work in biology and chemistry.

The subjects of the Pass and Honour Examinations of the first year are—

1. Natural philosophy.
2. Biology.
3. Chemistry, including laboratory work.

During the second year candidates must attend lectures on:—

1. Junior Anatomy during three terms.
2. Histology, elementary physiology, and physiological chemistry with practical work.

Must perform a first course of dissections.

And must produce certificates of having:—

- (i.) Attended *post-mortem* demonstrations during the first term.

(ii.) Received tutorial instruction in elementary surgery during the second and third term.

(iii.) Attended the out-patients surgical practice of a general hospital recognised by the University of Melbourne during the second and third term.

(iv.) Received instruction in Practical Pharmacy during the first term and of having acquired a practical knowledge of the preparation of medicines.

The subjects of the examination of the second year are:—

1. Junior anatomy (pass or honours).
2. Histology, elementary, physiology and physiological chemistry (pass or honours).
3. Materia medica and pharmacy (pass only).

During the third year, candidates must attend lectures on:—

1. Senior anatomy during three terms.
2. Physiology during three terms.

Perform a second course of dissections, attend a practical course of pathological histology during one term, and produce certificates of having:—

(i.) Attended *post-mortem* demonstrations during three terms.

(ii.) Received tutorial instruction in elementary medicine during the first and second terms.

(iii.) Attended during the second and third terms the out-patient medical practice of a general hospital.

The subjects of the pass and honour examinations of the third year are:—

1. Senior anatomy.
2. Physiology and histology.

During the fourth year candidates must attend lectures on:—

1. Pathology, three terms.
2. Therapeutics Dietetics and Hygiene during the first and second terms, with practical demonstrations in the third term.

3. Obstetrics and Diseases of Women during the first and second terms.

Attend the course of elementary practical bacteriology during six weeks. Attend during nine full months the surgical practice of a general hospital, such attendance to include clinical instruction and lectures on clinical surgery. And act as surgical dresser during at least six months.

The subjects of the examination of the fourth year are:—

1. Pathology (pass or honours).
2. Therapeutics Dietetics and Hygiene (pass or honours).
3. Junior Surgery and Surgical Anatomy (pass only).

During the fifth year candidates must attend lectures on—

1. Theory and Practice of Medicine during three terms.
2. Surgery during three terms.
3. Forensic medicine during three terms with supplementary practical demonstrations.

Attend during nine full months the medical practice of a general hospital such attendance to include clinical instruction and lectures on clinical medicine. Act as medical ward clerk during at least six months. Act as clinical assistant during one term in the out-patient department of a general hospital. Attend *post mortem* demonstrations during six months. Attend demonstrations of operative surgery on the dead subject.

The subjects of the pass examination of the fifth year are—

1. Theory and practice of medicine.
2. Surgery.
3. Obstetrics and diseases of women.
4. Forensic medicine.

At this examination candidates must, as a part of the examination in theory and practice of medicine—

(a) Write a brief history of at least one case selected by the examiners.

(b) Examine patients at the bedside, and describe the appropriate treatment.

And as a part of the examination in surgery—

(a) Examine patients at the bedside and describe the appropriate treatment.

(b) Perform operations on the dead subject, and apply surgical apparatus.

During the fifth year candidates must produce certificates that, after completing the third year, they have—

1. Attended at least twenty cases of midwifery.

2. Attended during six weeks a course of practical gynaecology with clinical instruction in a special hospital or special department of a general hospital.

3. Acquired proficiency in vaccination.

And attended two of the following courses—

4. Twelve lectures on diseases of children, with clinical instruction during six weeks.

5. Twelve lectures on ophthalmic medicine and surgery, with clinical instruction during six weeks.

6. Twelve lectures on diseases of the skin, with clinical instruction during six weeks.

7. Twelve lectures on mental diseases, with clinical instruction during twelve weeks in a hospital for the insane.

At the fifth or final honour examination, candidates may obtain honours in one or more of the following subjects:—

(a) Medicine.

(b) Surgery.

(c) Obstetrics and diseases of women.

PROFESSORS.

Physiology and Histology.—George Britton Halford, M.D., Emeritus Professor, Charles James Martin, M.B., D.Sc., F.R.S., Acting Professor.

Descriptive and Surgical Anatomy and Pathology.—Harry Brookes Allen, M.D., B.S.

Chemistry.—David Orme Masson, M.A., D.Sc., F.R.S.E.

Biology.—Walter Baldwin Spencer, M.A., F.R.S.

Natural Philosophy.—Thomas Ranken Lyle, M.A.

LECTURERS.

Theory and Practice of Medicine.—James Jamieson, M.D.

Obstetrics and Diseases of Women.—George Rothwell Wilson Adam, M.B., C.M.

Forensic Medicine.—James Edward Nelid, M.D., Ch.B.

Therapeutics, Dietetics, and Hygiene.—John William Springthorpe, M.A., M.D., M.B.C.P. Lond.

Surgery.—Frederic Doogan Bird, M.B., M.S., M.R.C.S. Eng.

Anatomy.—George Adlington Syme, M.B., M.S., F.R.C.S. Eng.

Bacteriology.—Thomas Cherry, M.D., M.S.

DEMONSTRATORS AND ASSISTANT LECTURERS.

Chemistry.—William Heber Green, M.Sc.

Biology.—Thomas Sergeant Hall, M.A.

Natural Philosophy.—Ernest Frederick John Love, M.A., F.R.A.S.

Assistant Lecturer.—Physiology (Special Senses).—James William Barrett, M.D., M.S., F.R.C.S. Eng.

DEMONSTRATORS.

Histology.—Walter Fielder, F.R.M.S.

Anatomy.—George Adlington Syme, M.B., M.S.,

F.R.C.S. Eng. (Senior), George Campbell Rennie, M.B., M.S., F.R.C.S. Eng., Arthur Geoffrey Owen, M.B., B.S.
Pathology.—Henry George Chapman, M.B., B.S., Philip Timothy Putnam, M.B., B.S.
Bacteriology.—Alfred Edward Bowden White, M.B., B.S., Laura Mary Fox, M.A.

ASSISTANT DEMONSTRATORS.

Anatomy.—John Gordon, M.D., B.S., F.R.C.S. Eng., James Spittal Buchanan, M.B., C.M., F.R.C.S. Eng., Thomas Francis Ryan, M.B., B.S., Charles Perry, M.B., B.S.

Physiology.—John Francis Wilkinson, M.D., B.S.

Degree of M.D.—Candidates for the degree of Doctor of Medicine must be Bachelors of Medicine of at least two years' standing in the University of Melbourne, or in some other University recognised by it.

Candidates must also produce evidence that subsequent to the completion of their third year for the degree of Bachelor of Medicine and Bachelor of Surgery they have attended during three months the practice of a Hospital for the Insane.

Candidates may proceed to the Degree of Doctor of Medicine by examination, or by presentation of a thesis.

Candidates are required as part of the examination:—

1. To write commentaries on cases in medicine and in obstetric medicine and diseases of women and children.

2. To examine such medical patients as the examiners may indicate, and answer interrogations *vis à vis*.

3. To answer oral interrogations on their Commentaries, and on Medicine and Medical Psychology.

Degree of M.S.—Candidates for the degree of Master of Surgery must be Bachelors of Surgery of at least two years' standing in the University of Melbourne, or in some other University recognised by it.

Candidates for examination for the degree of Master of Surgery, must be Bachelors of Surgery of at least one year's standing.

The subjects of the examination are:—

Surgery.

Surgical Anatomy with dissections and demonstrations on the dead subject.

Surgical pathology.

Surgical operations on the dead subject.

The practical use of surgical apparatus.

Candidates must as a part of this examination:—

1. Write commentaries on cases of surgery.

2. To examine such surgical patients as the examiners may indicate, and to answer interrogations *vis à vis*.

3. To answer oral interrogations on their commentaries, and on surgery, surgical anatomy, surgical pathology, surgical operations, and the practical use of surgical apparatus.

FEEs.

For Bachelor of Medicine and Bachelor of Surgery—

For the first year ... £18 18 0

For the second year ... 21 0 0

For any subsequent year ... 25 4 0

TRAINED MALE NURSE seeks engagement in mental or ordinary medical cases. Has had considerable experience in mental nursing, massage, etc., and is accustomed to travelling with patients to Europe and in the Australasian States. Unexceptional testimonials. References kindly permitted to Dr. F. N. Manning, Jarvie Hood, W. E. Warren, T. S. Dixon.

Address: B. T. O'NEILL, 68 Crown Street, near William St. (Late 17 Leicester St., Sydney.)

University of Sydney.

THE Faculty of Medicine in the Sydney University grants three degrees, viz.: Doctor of Medicine (M.D.), Bachelor of Medicine (M.B.), and Master of Surgery (Ch.M.).

Candidates for a degree in Medicine must, before admission to the Medical School, produce evidence of having graduated in Arts or in Science, or of having attended the lectures of the first year of the Arts course, and passed the first year examination in Arts, or of having passed the Senior Public examination in the following subjects:—Latin and one of the three languages—Greek, French, German; and in three of the sections in Group III. of the subjects for which senior candidates may enter:—Arithmetic, algebra, geometry, trigonometry, elementary surveying and astronomy, mechanics, applied mechanics.

Degree of M.B., Ch.M.—Candidates for the degree of Bachelor of Medicine and Master of Surgery must attend the following courses of instruction, and present the following certificates:—

1. In the First Year :
 - Chemistry, inorganic, and practical chemistry.
 - Physics and practical physics.
 - Biology and practical biology.
2. In the Second Year :
 - During Lent and Trinity Terms—
 - Descriptive anatomy (junior course).
 - Physiology (junior course).
 - During Trinity and Michaelmas Terms—
 - Practical physiology (histology and experimental physiology).
 - During Michaelmas Term—
 - Descriptive anatomy (senior course).
3. In the Third Year :
 - During Lent Term—
 - Practical physiology (physiological practical chemistry).
 - During Lent and Trinity Terms—
 - Materia medica and therapeutics (seventy-five lectures).
 - Regional anatomy.
 - During Michaelmas Term—
 - Physiology (senior course).
4. In the Fourth Year :
 - During Lent and Trinity Terms—
 - Pathology.
 - Surgery.
 - Operative surgery and surgical anatomy (a course of twenty-five hours' instruction).
 - Clinical surgery.
 - Tutorial surgery.
 - During Michaelmas Term—
 - Practical pathology.
 - Clinical surgery.
 - Tutorial medicine.
5. In the Fifth Year :
 - During Lent and Trinity Terms—
 - Medicine.
 - Midwifery (fifty lectures).
 - Gynaecology (twenty-five lectures).
 - Applied logic (twenty lectures).
 - Clinical medicine (twice weekly).
 - Tutorial medicine.
 - During Trinity and Michaelmas Terms—
 - Medical jurisprudence and public health.
 - During Michaelmas Term—
 - Psychological medicine, including clinical instruction, and at least twelve systematic lectures.
 - Ophthalmic medicine and surgery, including clinical instruction, and at least twelve systematic lectures.
 - Clinical medicine (twice weekly).

The courses of instruction in ophthalmic medicine and surgery and psychological medicine may be taken by the student in either the fourth or fifth year of study, as may from time to time be provided by the teaching regulations of the university. The course of instruction in applied logic may be taken by the student in any year of study.

Before admission to the final examination, candidates are required to present the following certificates:

1. Of hospital practice during the fourth and fifth years.
2. Of attendance on a class of practical pharmacy approved by the Faculty of Medicine.
3. Of having acted not less than nine months as clinical clerk in the medical wards, not less than six months as dresser in the surgical wards, and not less than three months in each of the following capacities, in a recognised hospital, viz.:—Clinical clerk and dresser in the gynaecological in-patients' department; student in attendance upon the surgical out-patients' department; student in attendance upon the medical out-patients' department; student in attendance upon the gynaecological out-patients' department.
4. Of attendance upon *post-mortem* examinations during at least one term during the fourth and fifth years of the curriculum.
5. Of attendance on at least twelve cases of practical midwifery.
6. Of proficiency in vaccination, signed by a qualified medical practitioner.
7. Of proficiency in the administration of anaesthetics.
8. Of having attended a course of twenty lectures on applied logic, and of having passed a satisfactory class examination in the subjects thereof.

For the degrees of Bachelor of Medicine and Master of Surgery there are five examinations, viz.:—One at the end of each year of study.

At the end of the first year, inorganic and organic chemistry, physics and biology.

At the end of the second year, an intermediate examination in anatomy and physiology.

At the end of the third year, the entire subjects of anatomy, physiology, and materia medica and therapeutics.

Before admission to the third examination, candidates are required to present certificates of having dissected during at least six terms, and of having completed the dissection of every part of the body, at least once.

The examination at the end of the fourth year includes pathology and operative surgery, and surgical anatomy.

The examination at the end of the fifth year includes medicine, clinical medicine, surgery, clinical surgery, midwifery, medical jurisprudence and public health, psychological medicine, and ophthalmic medicine and surgery.

The examination in ophthalmic medicine and surgery forms a part of either the fourth year or the fifth year examination, according as the student has attended the course in these subjects in his fourth or fifth year of study.

Before admission to the final examination, each candidate must furnish a declaration of having completed his twenty-first year, and also a certificate of good fame and character signed by two competent persons.

The degree of Master of Surgery is not conferred on any person who has not already been admitted a Bachelor of Medicine.

Degree of M.D.—The degree of Doctor of Medicine is not conferred until after the expiration of two

academic years from the granting of the degree of Bachelor of Medicine.

Candidates for the degree of Doctor of Medicine must produce evidence that after having obtained the degree of Bachelor of Medicine they have spent at least two years in medical or surgical practice, or that they have been engaged for a like period in a manner approved by the Faculty in the scientific study of any subject included in the Medical curriculum of the University of Sydney.

Candidates are required to pass an examination in one division of one of the following groups:—

1. Medicine, surgery midwifery, and gynaecology. The examination in each case shall include examination of, and report on, the cases of patients in a hospital, and examination and demonstration of specimens or preparations, normal or morbid.

2. The other subjects included in the medical curriculum of the University.

They are required to present a thesis on some subject included in the medical curriculum of the University.

The fees for the degrees of Doctor of Medicine, Bachelor of Medicine, and Master of Surgery are ten pounds respectively.

Candidates who fail to pass the examination for any degree are allowed to present themselves for a second examination for the same degree without fee; but for every further examination that may be required they must pay the sum of five pounds.

PROFESSORS.

Anatomy—Challis Professor.—Prof. James T. Wilson, M.B., C.M. Edin.

Biology—Challis Professor.—Prof. William A. Haswell, D.Sc. Edin., F.R.S.

Chemistry.—Prof. Archibald Liversidge, M.A., LL.D., F.R.S.

Pathology.—Prof. David Welsh, M.D. Edin.

Physics.—Prof. J. A. Pollock, B.Sc.

Physiology.—Prof. T. P. Anderson Stuart, M.D., C.M., LL.D. Edin., Dean of the Faculty of Medicine.

LECTURERS AND DEMONSTRATORS.

Materia Medica and Therapeutics.—T. Storie Dixon, M.B., C.M. Edin.

Principles and Practice of Medicine.—W. Camac Wilkinson, M.D., M.R.C.P. Lond.

Clinical Medicine.—R. Scot Skirving, M.B., C.M. Edin.

Clinical Surgery.—Charles P. B. Clubbe, M.R.C.S., L.R.C.P.; H. V. Critchley Hinder, M.B., Ch.M.

Medical Jurisprudence and Public Health.—W. H. Goode, M.D., Ch.M.

Medical Tutor.—G. E. Rennie, M.D., M.R.C.P. Lond.

Midwifery.—Sir Jas. Graham, M.D., C.M. Edin.

Diseases of Women.—Joseph Foreman, M.R.C.S.

Ophthalmic Medicine and Surgery.—F. Antill Pockley, M.B., C.M. Edin.

Principles and Practice of Surgery.—Alexander MacCormick, M.D. Edin., F.R.C.S. Eng.

Psychological Medicine.—Chisholm Ross, M.D. Syd.

Surgical Tutor.—John Morton, M.B., Ch.M.

DEMONSTRATORS.

Biology.—James P. Hill, B.Sc., F.L.S.

Chemistry.—James A. Schofield, F.C.S.

Physiology.—Herbert Hawker.

HONORARY LECTURERS.

Diseases of the Skin.—Dr. F. A. Bennet.

Demonstrations in Psychological Medicine and Neurology.—Dr. J. F. Flashman.

Diseases of the Ear.—G. T. Hankins, M.R.C.S.

Ethics of Medical Practice.—Dr. P. Sydney Jones.

Diseases of Children.—Dr. A. E. Mills.

University of Adelaide.

In the Faculty of Medicine, four degrees are granted by the Adelaide University, Bachelor of Medicine, Bachelor of Surgery, Doctor of Medicine, and Master of Surgery.

No student is permitted to commence the Medical Course until he has completed his sixteenth year.

Students, before entering on the Medical Course are required to pass the senior public examination in the English language and literature, Latin, mathematics, and one of the following:—Greek, French, German or Italian. To obtain the degrees of Bachelor of Medicine and Bachelor of Surgery every candidate must complete five academical years of medical study, and pass the examination proper to each year.

During the first academical year students are required:—

(a) To attend a course of lectures on anatomy.

(b) To dissect during six months to the satisfaction of the Professor of Anatomy.

(c) To attend a course of lectures on physiology.

(d) To perform practical biological and physiological work during such academical year to the satisfaction of the Lecturer on Physiology.

(e) To attend a course of lectures on chemistry.

(f) To perform practical work in inorganic chemistry during three months to the satisfaction of the Professor of Chemistry.

(g) To attend a course of lectures on botany.

(h) To attend lectures on the elements of heat, electricity, magnetism, light, and acoustics, unless he shall have already passed in these subjects at either the junior or senior public examinations.

At the first examination every student must satisfy the examiners in elementary anatomy and dissections, elementary biology and physiology, theoretical and practical; inorganic chemistry, theoretical and practical; botany, and the elements of physics.

During the second academical year students are required:—

(a) To attend a course of lectures on anatomy.

(b) To dissect during six months to the satisfaction of the Professor of Anatomy.

(c) To attend a course of lectures on physiology.

(d) To perform practical physiological work during such academical year to the satisfaction of the Lecturer on Physiology.

(e) To attend a course of lectures on organic chemistry.

(f) To perform practical work in organic chemistry and toxicology during three months to the satisfaction of the Professor of Chemistry.

(g) To attend a course of lectures on materia medica and elementary therapeutics.

At the second examination every student must satisfy the examiners in—

1. Anatomy with dissections.

2. Physiology, including practical physiology, histology and physiological chemistry.

3. Chemistry—organic chemistry, theoretical and practical.

4. Materia medica and elementary therapeutics.

During the third academical year students are required:—

(a) To attend a course of lectures on anatomy.

(b) To dissect during six months to the satisfaction of the Professor of Anatomy.

(c) To attend a course of demonstrations on regional and surgical anatomy.

(d) To attend a course of lectures on physiology.

(e) To perform practical physiological work during such academical year to the satisfaction of the Lecturer on Physiology.

(f) To attend a course of lectures on therapeutics.
 (g) To attend a course of practical demonstrations on elementary bacteriology, and to produce a certificate of proficiency, signed by the Demonstrator.

(h) To receive instruction in practical pharmacy during a period of three months from some person approved of by the Council.

At the third examination every student must satisfy the examiners in—

1. Anatomy with dissections.
2. Regional and surgical anatomy.
3. Physiology, including practical physiology, histology and practical chemistry.
4. Therapeutics.

During the fourth academical year, students shall be required—

(a) To attend a course of lectures on the principles and practice of medicine.

(b) To attend a course of lectures on clinical medicine.

(c) To attend a course of lectures on the principles and practice of surgery.

(d) To attend a course of lectures on clinical surgery.

(e) To attend a course of lectures on practical surgery.

(f) To attend a course of lectures on obstetrics.

(g) To attend a course of lectures on forensic medicine.

(h) To attend a course of lectures on pathology.

(i) To perform a course of operative surgery.

(j) To attend diligently *post-mortem* examinations at the Adelaide Hospital for six months, during three of which he shall perform them himself.

(k) To hold the office of Dresser and Surgical Clerk at the Adelaide Hospital during six months.

(l) To receive instruction in dentistry from some person approved by the Council.

(m) To attend diligently the medical and surgical practice of the Adelaide Hospital both in the wards and in the out-patient's department during nine months.

At the fourth examination every student must satisfy the examiners in—

1. The principles and practice of medicine, including clinical medicine.

2. Principles and practice of surgery, including surgical anatomy, clinical surgery and operative surgery.

3. Forensic medicine.

4. Pathology.

During the fifth Academical Year students are required—

(a) To attend a course of lectures on the principles and practice of medicine.

(b) To attend a course of lectures on clinical medicine.

(c) To attend a course of lectures on the principles and practice of surgery.

(d) To attend a course of lectures on clinical surgery.

(e) To attend a course of lectures on the diseases peculiar to women.

(f) To attend a course of lectures on ophthalmic surgery.

(g) To attend a course of lectures on aural surgery.

(h) To attend a course of lectures on lunacy and to attend the practice of the Hospitals for the Insane during three months.

(i) To attend diligently the medical and surgical practice of the Adelaide Hospital, both in the wards and in the out-patient's department during nine months.

(j) To attend twenty cases of midwifery, provided that the whole or any part of such number may be attended during the last six months of the fourth year.

(k) To hold the office of Medical Clerk at the Adelaide Hospital during six months.

1. To receive instruction in vaccination from some legally qualified practitioner approved by the Council.

At the fifth examination every student must satisfy the examiners in—

1. Medicine, all branches.

2. Surgery, all branches, including surgical anatomy and operative surgery.

3. Obstetrics and diseases peculiar to women.

4. Elements of hygiene.

Candidates for the degree of Doctor of Medicine must produce a certificate of having, subsequently to admission to the degree of Bachelor of Medicine:—

(a) Attended to clinical or practical medicine, during two years in a hospital or medical institution recognised by this University.

(b) Or, attended to clinical or practical medicine, during one year, in a hospital or medical institution recognised by this University, and of having engaged, during three years, in the practice of his profession.

(c) Or of having been engaged, during five years, in the practice of his profession.

Candidates must satisfy the examiners in either—

1. Theory and practice of medicine, including pathology, therapeutics and hygiene.

2. Or, mental physiology and lunacy.

3. Or, obstetrics and diseases of women.

4. Or, the history of medicine.

It is optional for candidates to substitute for the examination in the history of medicine a written thesis relating to some one of the subjects included in the medical curriculum.

Candidates for the degree of Master of Surgery must produce a certificate of having subsequently to admission to the degree of Bachelor of Medicine in this University or in any other university whose degrees are recognised by the University of Adelaide

(a) Attended to clinical or practical surgery during two years in a hospital or medical institution recognised by this University;

(b) Or, attended to clinical or practical surgery during one year in a hospital or medical institution recognised by this University, and of having been engaged during three years in the practice of his profession.

(c) Or, of having been engaged during five years in the practice of his profession.

Candidates must satisfy the examiners in all branches of surgery, including anatomy, surgical pathology and operative surgery.

1. To write commentaries on surgical cases.

2. To write a short extempore essay on some surgical topic.

3. To examine and report on cases of surgical patients in the wards of a hospital.

The total fees for M.B., Ch.B., £152 5s.

For the degree of M.D., £26 5s.

For the degree of Ch.M., £26 5s.

PROFESSORS AND LECTURERS.

Chemistry.—Professor E. H. Rennie, M.A., D.Sc.

Anatomy.—Professor A. Watson, M.D., F.R.C.S.

Lecturer on Physiology.—E. C. Stirling, C.M.G., M.D., F.R.C.S.

Lecturer on Medicine and Therapeutics.—J. C. Verco, M.D., F.R.C.S.

Lecturer on Surgery.—B. Poulton, M.D., M.B.C.S.

Lecturer on Obstetrics.—J. A. G. Hamilton, M.B. et L. Mid. et L.R.C.S.

Lecturer on Materia Medica.—W. L. Cleland, M.B.

Lecturer on Ophthalmic Surgery.—M. J. Symons, M.D., Ch.M.

Lecturer on Forensic Medicine.—A. A. Lendon, M.D.

Lecturer on Lunacy.—W. L. Cleland, M.B.

Lecturer on Aural Surgery.—W. A. Giles, M.B., Ch.M.

Lecturer on Pathological Anatomy and Operative Surgery.—Prof. A. Watson, M.D., F.R.C.S.

University of New Zealand.

THE University of New Zealand is an examining body only, and is modelled on the lines of the University of London, with affiliated Colleges. The University of Otago in Dunedin is the only institution in which a complete medical education can be obtained, but preliminary education in Arts and Science can be obtained also at Auckland College, University College, Victoria College at Wellington, and Canterbury College.

Medical students, unless they are already graduates in Arts or Science, must pass a preliminary examination in English, Latin, Elements of Mathematics, and either Greek, French or German. No candidate is admitted to the final examinations for Degrees in Medicine unless he has been registered as a medical student for at least fifty-seven months previously.

Three Degrees in Medicine are conferred, viz.: Bachelor of Medicine, Bachelor of Surgery, and Doctor of Medicine.

Degree of M.B. and Ch.B.—There are an intermediate examination and three professional examinations. These are conducted by written questions and *visæ vocæ*. Excellence in one or more subjects at an examination does not compensate for failure in others.

Intermediate examination.—This is held not earlier than November in the student's first year, and includes biology, physics, and inorganic chemistry. The subjects of this examination may be taken together or separately, at the option of the candidate.

First Professional Examination.—This is held not earlier than November in the student's third year, and includes organic chemistry, practical chemistry, and anatomy. Before admission to this examination the student must furnish certificates:—

1. Of having attended not less than one hundred lectures on chemistry, including organic chemistry.

2. Of having received six months' instruction in practical chemistry.

3. Of having attended a course of not less than one hundred lectures on human anatomy.

4. Of having dissected the human body during two periods of six months each.

Second Professional Examination.—This is held in November, in the student's fourth year, and includes physiology, pathology and morbid anatomy, and materia medica. Before admission to this examination, the student must furnish certificates:—

1. Of having attended a course of lectures of not less than sixty lectures, and gone through a course of practical work in physiology.

2. Of having attended a course of not less than sixty lectures, and gone through a course of practical work in pathology.

3. Of having attended a course of not less than sixty lectures on materia medica.

4. Of having practised the dispensing of medicine for three months.

5. Of having attended the *post mortem* examinations of a hospital containing not less than one hundred beds, for two periods of six months each.

Third Professional Examination.—The third professional examination is held in November in the student's fifth year, and includes surgery, clinical surgery, medicine (including therapeutics and insanity), clinical medicine, surgical and medical anatomy, midwifery and diseases of women, medical jurisprudence and public health. The following certificates are necessary to admit the student to this examination:—

1. Of having been registered as a medical student at least fifty-seven months previously.

2. Of being 21 years of age.

3. Of having attended a course of not less than one hundred lectures in surgery.

4. Of having attended a course of not less than fifty lectures in clinical surgery.

5. Of having attended a course of instruction in practical and operative surgery.

6. Of having attended a course of not less than one hundred lectures in medicine.

7. Of having attended a course of not less than fifty lectures in clinical medicine.

8. Of having attended a course of not less than one hundred lectures in medical jurisprudence and public health.

9. Of having attended a course of not less than sixty lectures on midwifery and diseases of women.

10. Of having received practical instruction in diseases of women.

11. Of having received a three years' course of regular clinical instruction in the medical and surgical practice of a hospital containing not less than 100 beds. This certificate must state that the student has acted for six months as clinical clerk in the medical wards, and six months as dresser in the surgical wards. Six months of this hospital practice may be taken at a lunatic asylum containing not less than one hundred beds.

12. Of having attended six midwifery cases.

13. Of dispensary practice for six months, either in the out-patient department or at a public dispensary, or with a qualified practitioner.

14. Of having had instruction and practice in vaccination.

15. Of having had clinical instruction in insanity at an asylum containing not less than two hundred beds.

Degree of M.D.—A candidate for the degree of Doctor of Medicine must be a graduate of a University in Arts or Science, and not less than 24 years of age. He must have obtained the degree of M.B. at least two years previously, and must have been engaged during the interval in the practice or study of his profession.

Candidates must send in a thesis on some subject of the medical curriculum, and be examined both in writing and orally on any one of the following groups of subjects:—1. Anatomy and physiology. 2. Surgery and anatomy. 3. Medicine and pathology. 4. Public health and medical jurisprudence.

There are about 120 students in all the year in the Faculty of Medicine, and the total fees for graduation as M.B. and Ch.B. amount to about £110.

The following are the lecturers in the subjects of the medical curriculum at the University of Otago:—

Anatomy and Physiology.—J. H. Scott, M.D. Edin., M.R.C.S. Eng., F.R.S.E.

Surgery.—L. E. Barnett, M.B., C.M. Edin., F.R.C.S. Eng.

Practice of Medicine.—D. Colquhoun, M.D. Lond., M.R.C.P. Lond., M.R.C.S. Eng.

Pathology.—W. S. Roberts, M.R.C.S. Eng.

Midwifery and Diseases of Women.—F. C. Batchelor, M.D. Durh., M.R.C.S. Eng., L.R.C.P. et L.M. Edin., L.S.A.

Materia Medica.—J. Macdonald, L.R.C.P. et S. Edin., M.R.C.S. Eng.

Medical Jurisprudence and Public Health.—F. Ogston, M.D., C.M. Aberd.

Ophthalmology.—H. L. Ferguson, M.A., M.D. Dublin, F.R.C.S. Irel., L.K.Q.C.P. Irel.

Mental Diseases.—F. T. King, M.B., C.M., B.Sc. Edin.

Clinical Medicine and Surgery.—The Honorary Staff of the Dunedin Hospital.

REVIEW OF CURRENT MEDICAL LITERATURE.

PEDIATRICS.

Congenital Absence of the Abdominal Muscles with Distended and Hypertrophied Urinary Bladder.

Osler (*Bulletin of the Johns Hopkins Hospital*, November, 1901), records a case of this extremely rare condition. The author could only find reports of two similar cases—one in the Clinical Society's Transactions (Vol. 28, 1895), by R. W. Parker, and one in the Transactions of the Pathological Society of London (Vol. 47), by Dr. Leonard Guthrie. The author's case was that of a boy aged six years, who was admitted to the hospital in 1897, complaining of stomach trouble, and difficulty in passing urine. His family history was good. His chest had been deformed from birth, but he appeared to have had good health till the second summer, when he had severe stomach trouble. There had been recurrences of these attacks each year, some of these had been gastric attacks, but others, and apparently the chief troubles, had been with the urine. The attacks lasted four or five weeks, and had been getting more frequent lately. On examination the patient was found to be a poorly nourished child, somewhat anæmic, and complaining of pain chiefly in the hypogastric and lower umbilical regions. There was a remarkable fullness in these regions, which were occupied by an ovoid mass corresponding to a dilated bladder. The urine obtained by catheter was free from albumin, and contained a good many leucocytes. In the erect posture the attitude was remarkable. It was not quite symmetrical, being fuller on the right side than on the left. The navel was stretched and distended. Above it there was seen on either side the attachment of the recti to the sternum and costal margin. The skin over the abdomen was thin; the veins a little prominent. When recumbent the belly flattened out in front, and extended at the flanks. Coils of intestine could be seen in peristalsis. There was extreme relaxation of the abdominal walls so that the finger could be passed everywhere to the spine. The liver, spleen and kidneys could be felt easily. The bladder could be felt as a firm ovoid body reaching almost to the navel. He could not raise himself off the bed without turning over. As he made the attempt the abdomen was thrust forward and slight contraction was seen of the expanded abdominal muscles and recti. The deformity of the thorax was also remarkable. The lower part of the sternum was thrust forward, forming almost a right angle with the xiphoid cartilage. There was also a condition of cryptorchidismus. The testes could not be felt in the groins. Osler states that the deficiency in the abdominal muscles and the high position of the bladder are associated conditions due to arrest of development. He was notable to say whether the bladder was adherent to the umbilical scar. Guthrie regarded the hypertrophy of the bladder and the dilatation of the ureters in his case as secondary, due to the fact that being firmly connected with the umbilical scar, it was unable to contract downward and to empty itself completely. In its effort to do so it became hypertrophied and dilated, and the accumulation of urine caused backward pressure and dilatation of the ureters.

Treatment of Scarlatinal Nephritis.

Saundby (*Birmingham Medical Review*, September, 1901), approves of the treatment of this condition advocated by Kerley, namely, irrigation of the colon with hot water as the best means of restoring the functions of the kidneys in scarlatinal nephritis. It should be employed whenever the quantity of urine is diminished or when convulsions occur. In a child aged three years, 500 to 750 cubic centimetres of water at a temperature of 43° C. should be introduced by means of a rectal tube passed into the rectum for a distance of 2.5 centimetres. If the water is returned at once it must be repeated, and irrigation should be continued every six or eight hours. After three or four administrations, the kidneys generally commence to act, and abundant diuresis takes place.

Acute Fatty Degeneration of the Liver.

Lister (*Scottish Medical and Surgical Journal*, July, 1901), reports the case of a girl aged six years, who was suddenly taken ill with slight jaundice, severe vomiting, pain, hæmorrhages, fits, coma, and death, the whole illness only lasting twelve days. The liver was felt to be enlarged throughout, and leucin was found in the urine. *Post-mortem* the liver was found to be considerably enlarged. It was in an advanced stage of fatty degeneration, fragments floating readily in water. When cut, the surface was of a canary-yellow colour. There was also an increase in the connective tissue elements of the interlobular tissue. The author considers that the condition was due to the entrance of some poison into the system, and one naturally thinks of phosphorus, but no history could be obtained of there being the least probability of the child having taken phosphorus in any form; further, the urine showed no trace of this poison, and no sign of it was found in the liver. It was possibly a case of acute yellow atrophy, but the fact that the liver remained enlarged throughout is against this diagnosis.

General Edema without Albuminuria in Children.

F. L. Batten (*Pediatrics*, September, 1901), describes a case of this nature, which he considers a typical one of Herringham's toxæmic drop-y. A boy, aged four years, had an attack of dropsy similar to the present one a year ago. He was then ill for a month, but completely recovered. His present illness began a week before he was seen by Batten, with swelling of the legs, face, and abdomen. He had never had scarlet fever, and was a well-nourished boy. The eyes were puffy, the abdomen cedematous with free fluid in it, and there was cedema of the legs. The heart was normal, and there was no albumin in the urine; the average quantity of urine for the 24 hours was 10 ounces, and the specific gravity was always high—1028 to 1035. The cedema rapidly diminished, and the boy left hospital in fourteen days, quite well. General cedema in children without albuminuria is seen in marasmic infants, in congenital syphilis, in the later stages of tuberculosis, and in association with diarrhoea and anæmic conditions.

MEDICINE.

The Temperature of Phthisis Treated by Open Air Methods.

Dr. D. Lawson, senior physician Nordrach-on-Dee Sanatorium, describes (*Medical Press and Circular*, December 18th, 1901) a new graphic method of showing the temperature. The temperature is taken four-

hourly, and the highest and lowest readings of each series of four days are averaged and marked on a chart, each space of which therefore represents a period of 96 hours. The space between the highest and lowest curves on the chart so obtained is blackened in, and the irregular band of ink thus got gives a better idea of the course of the case than the usual temperature curve. On the same chart the amount of sputum and the body weight are graphically represented. In the case of an active lesion undergoing arrest, the black band is at first broad and especially on its upper margin, irregular; as improvement takes place, the breadth of the band diminishes, showing less diurnal variation in the temperature and the band, as a whole, falls. With this character of the temperature the weight curve rises and the sputum curve falls. Dr. Lawson puts forward a strong plea for the rectal method of taking temperatures, claiming for it greater accuracy, and also that it gives indications of a rise twelve hours before such could be detected in the axilla or mouth.

A Case of Volvulus of the Ileum, with Severe Intestinal Hæmorrhage.

J. H. Bryant (*Clinical Society's Transactions*, Vol. xxxiv., 1901) reports the above on account of the great rarity of hæmorrhage *per anum* with any form of acute intestinal obstruction except intussusception. The patient, a male *æt.* 21, was admitted to Guy's Hospital September 18th, 1900, for pain in the abdomen. He had always enjoyed good health, and felt quite well until an hour or two after his supper on the previous night, at which he ate a large amount of damson pudding. He was suddenly seized with severe pain in the umbilical and hypogastric regions about 10 p.m. on September 17th, and was admitted to the hospital soon after midnight. On admission he appeared to be in great pain, and rolled about from side to side and groaned. Temperature, 99°; pulse, 80; respiration, 24. The pain was paroxysmal in character, and the abdomen was not distended. The lower part was rigid. Two ill-defined masses could be felt, one just below and to left of umbilicus, and the other in the hypogastric region. The pain continued throughout the day, and in the evening, about 8 o'clock, he became very collapsed and passed about a pint of bright red blood, and a large mass of undigested damson skins, about the size of a tennis ball. He became very blanched, and his pulse went up to 160, being feeble and running in character. The abdominal wall was very rigid, especially in the hypogastric region, and appeared to be extremely tender, but no tumour could be made out after the motion. Nothing abnormal was felt *per rectum*. In spite of hypodermic injections of strychnine and infusions of normal saline solution, he became more and more collapsed, and died at 5.30 a.m. September 20th. Just before death a quantity of feculent liquid poured from his mouth and nostrils. A *post-mortem* examination was made nine hours after death. With the exception of some thickening of the aortic valves, the heart, lungs, liver and kidneys were normal. The abdomen was distended. On opening the peritoneal cavity, several coils of ileum of a deep dull red colour were found lying in and just above the pelvic cavity. Large flakes and patches of recent lymph loosely bound the coils of intestine together. One hundred cms. of the ileum, the lowest portion being 10½ cms. from the ileo-cæcal valve, were involved. This portion of the gut was found to be attached to a long piece of mesentery, which had become twisted one and a half complete turns in its longitudinal axis. The intestine above the volvulus was distended, but

that below was not collapsed. During life the presence of volvulus was not suspected. The patient was admitted as an ordinary case of *colica ab ingestis*, and later the diagnosis of thrombosis or embolism of the mesenteric vessels was inclined to. The author thinks the mass of damson skins played an important part in the formation of the volvulus, as gall-stones in the intestine may cause rotation. The red fluid was proved to be blood by the guaiacum test, and by microscopical examination.

Pulmonary Incompetence in Mitral Stenosis.

Bryant (*Guy's Hospital Reports*, Vol. 55), gives records of 16 cases of functional pulmonary incompetence from his own experience at Guy's Hospital, and the results of *post-mortems* in nine cases. He states that in all the *post-mortems* on cases of advanced mitral stenosis he has seen, there have always been thickening, dilatation, and atheroma of the branches of the pulmonary arteries in the lungs. These marked structural changes in the branches of the pulmonary arteries may be looked upon as the result of the increased tension produced in the pulmonary circulation by the obstruction at the mitral valve. Syphilis probably does not play any important part in producing pulmonary artery degeneration. The most important physical sign of functional pulmonary incompetence is the presence of an early diastolic murmur, which is most frequently heard in the third left intercostal space, midway between the left sternal line and the left nipple line, but it may be heard in the second or fourth spaces in the same line. Some physicians think that this early diastolic murmur heard in the above-mentioned situations is created at the mitral valve itself. Bryant, however, considers this interpretation to be most unlikely, for he has never heard the crescendo or mid-diastolic bruits produced at the mitral valve in these spaces, and he cannot see how a stenosed mitral valve could produce an early diastolic murmur in this position. There is no doubt that an early diastolic murmur can be heard in cases of mitral stenosis at the point of cardiac impulse, and between the impulse and the left border of the sternum; but the author does not consider that there is any justification for interpreting the early diastolic murmur audible most frequently in the third left space midway between the left border of the sternum and the left nipple line, as being the direct result of the mitral lesion. He considers the theory of this murmur being due to dilatation of the pulmonary artery and functional incompetence more satisfactory, and supported by the very definite morbid changes found in the pulmonary artery and its branches in autopsies on advanced cases of mitral stenosis.

Functional Incompetence of the Pulmonary Valve.

Brockbank (*Medical Chronicle*, October, 1901) reports a case of this nature. A female, aged 19 years, was admitted to the Ancoats Hospital complaining of shortness of breath and palpitation. She had had no antecedent cause for heart trouble, such as rheumatism, chorea, etc., and had been quite well until three years previous to admission to hospital. On examination of the chest the apex beat was found to be in the fifth interspace, 3½ inches from the midsternal line. Cardiac dulness extended as far as this to the left, and three-quarters of an inch to the right of the midsternal line. On auscultation, at the apex there is a short, pre-systolic murmur terminated by an accentuated first sound, and followed by a double accentuated second sound. No diastolic murmur was audible. At the tricuspid area

the sounds were very accentuated, and the first sound was prolonged into a faint systolic murmur. This murmur was limited to the tricuspid area, and was not conducted away from it. At the aortic cartilage no murmur was heard, but both sounds were accentuated. Over the pulmonary area in the third left space, the heart sounds were very accentuated and "parhment-like" in tone, the second being double. There is also a distinct early diastolic murmur running off from the double second sound. This murmur is smooth and "whiffy," and suggestive of a leakage resulting from the high pressure in the pulmonary circulation. It is not conducted from one spot, and is scarcely audible at the left edge of the sternum in the same interspace. There are no signs of back pressure in the systemic venous circulation. This case is one of pulmonary regurgitation from functional incompetence of the valve, resulting from the high pressure in the pulmonary artery. The mitral valve is stenosed, and the right ventricle is hypertrophied. The systolic murmur over the tricuspid area is suggestive of dilatation.

Beri-Beri.

A. Stanley, Health Officer of Shanghai (*Journal of Tropical Medicine*, November, 1901) arrives at the following conclusions after having made observations on a series of 841 cases of beri-beri. (1) Beri-beri has a marked degenerative action on heart muscle, which frequently causes fatal circulatory failure. (2) In this respect beri-beri resembles other toxæmic diseases such as diphtheria, influenza, and alcohol and arsenic poisoning, which often cause peripheral neuritis, and also other toxæmic diseases, such as typhoid fever, plague, and acute rheumatism, which do not, or rarely, give rise to peripheral neuritis. (3) Beri-beri and diphtheria are the diseases *par excellence* in which sudden fatal heart failure occurs. (4) The heart muscle degeneration is not a secondary result of neuritis of the vagus. (5) The heart muscle degeneration takes place as a rule before skeletal muscle degeneration, and is the result probably of direct action of the toxin, and not a secondary result of nerve change. (6) Sudden heart failure does not indicate a sudden lesion, but rather is the result of a gradually increasing heart weakness from cardiac muscle degeneration, which may be precipitated by any sudden exertion, but more frequently is the result of the principle of "all or nothing"—the transition from "all" to "nothing" being necessarily rapid. (7) The cardiac physical signs in beri-beri closely resemble those found in diphtheria, and are of paramount importance in prognosis and treatment.

Gastric Ulcer.

Attention has been drawn recently on several occasions to the fact that in some cases where laparotomy has been performed for the purpose of excision of a gastric ulcer in patients presenting the usual clinical symptoms of this disease, no ulcer has been found; and it has also been remarked that the number of cases met with in the *post mortem* room presenting the signs of past or recent gastric ulcer seems to be much smaller than one would expect, judging from the comparative frequency with which gastric ulcer is diagnosed during life. In a recent lecture at Guy's Hospital, London (*Guy's Hospital Gazette*, August and September, 1901) Hale White answers in the affirmative the question: Are not many patients, supposed to be suffering from gastric ulcer, really suffering from some other disease? According to statistics gastric ulcer is very much more common

in women than in men, while *post mortem* records show usually that the excess is much larger in men than in women; and this fact would seem to point to the conclusion that gastric ulcer is either much more favourable as regards its prognosis in women than in men, or else that frequently the clinical diagnosis of gastric ulcer is incorrect. Hale White has often suggested at the bedside that there is a disease, not ulcer, met with chiefly in women between twenty and forty years old, and that its chief symptoms are gastric pain, sickness and hæmatemesis. If there is any ulcer it is probably quite superficial and secondary to the hæmorrhage. A diagnosis between this condition and true gastric ulcer is extremely difficult, but White emphasises the following points: first, these patients may show serious gastric symptoms for many years, even as long as 15 years, and yet not show any great wasting, such as is seen commonly in many cases of gastric ulcer; second, they nearly always have intervals of good health, while patients suffering from gastric ulcer do not nearly so often get intervals of good health; third, these cases of hæmatemesis in young women are very frequently associated with chlorosis, there being no special association between chlorosis and genuine gastric ulcer, for genuine gastric ulcer occurs in men in whom chlorosis is unknown. Another point is that this condition, which is to be distinguished from true ulcer, occurs in women from 20 to 40 years of age; and, further, it is not followed by any of the organic or mechanical results of ulceration of the stomach. The prognosis is different in the two conditions. That of true gastric ulcer, in view of the possible grave complications, is not good; but it is good in the condition characterised by pain, sickness, and hæmatemesis occurring in young women. The author suggests that chlorotic dyspepsia, which is so common, is nothing but an early stage of the condition which he describes. He cites several cases of hæmatemesis supposed to be due to ulcer of the stomach, in which autopsy or operation has revealed no evidence of ulceration. While no one doubts the accuracy of Hale White's statements, in view of the admitted difficulty of certainty in diagnosis of gastric ulcer, one is certainly justified as regarding, for the purposes of treatment, any case presenting clinically the symptoms of gastric pain, sickness, and hæmatemesis, as one of gastric ulcer.

PATHOLOGY.

Primary Endothelioma of Pleura.

Adler (*Journal of Medical Research*, July, 1901) reports a case of this nature and describes and illustrates the microscopical appearances presented by the growth. A man, aged 26 years, with no previous history of any chest trouble, and whose father died of cancer of the stomach, died in the German Hospital, New York, after an illness of nine weeks. The diagnosis of a rapidly growing malignant neoplasm of the right pleura was made, and the autopsy confirmed this diagnosis. On microscopical examination of sections of the neoplasm, it was seen to consist of alveolar spaces bounded by tracts of connective tissue interlacing in different directions. The central portion of these alveolar spaces was crowded with cells with hardly any interstitial tissue; but towards the periphery the cells were seen to be arranged in parallel layers supported by bands of fibrous tissue. At the very edge of the alveoli there are numerous tubules and wider cyst-like spaces lined with cuboidal cells, these latter are either arranged in single rows, or one or more layers of flattened, round, or polymorphous cells are super-imposed above them. Between the

fibres of connective tissue the endothelium of the lymph spaces is seen in a state of active proliferation, forcing the bundles of fibrous tissue apart by rows and layers of cells. These cells are in close contact with fibrous tissue on all sides; the endothelium of the capillaries appears everywhere quite normal and quiescent. The surface epithelium of the pleura has for the most part disappeared, but in those portions of the pleura not directly invaded by the neoplasm, the surface lining has but rarely remained intact; nowhere, however, is there the slightest evidence of any proliferation of the surface epithelium. This agrees with the results of Glockner (*Zeitsch. f. Heilkunde*, Vol. 18) who found not a single well authenticated instance of the surface epithelium of the pleura or peritoneum taking part in the formation of endothelioma. There has been much discussion as to the exact relations of this form of tumour. At the present moment the discussion turns on the question: What is endothelium, what is epithelium, and are these tumours of endothelial or epithelial origin? If endothelium is a derivative of the mesoderm and as such belongs to the connective tissue group, then endotheliomata must belong to a class of sarcomatous tumours. From the time of His until very recently no one doubted that all endothelium was of mesodermal origin. The researches of Hertwig and others have made it very probable that the surfaces of the pleura and peritoneum are lined with true epithelium, and Waldeyer has quite recently proposed to restrict the term "endothelium" to the cellular lining of lymph and blood channels and capillaries—these cells belonging undoubtedly to the connective tissue group—but to admit the surface lining of pleura and peritoneum into the group of epithelial cells. If we accept this, the position of endothelioma of the lung and pleura is plainly indicated. No instance has yet been credibly demonstrated in which an endothelioma took its origin from the surface epithelium of the pleura or from the epithelium of the pulmonary alveoli. In every case the point of origin was from cells which, even according to the latest views, indubitably belong to the mesodermal connective tissue group. The author suggests the separation of endothelioma of the lung and pleura from carcinoma and allied epithelial and glandular tumours, and places it in the group of connective tissue growths nearly allied to sarcoma.

The Bacteriological Diagnosis of Typhoid Fever.

Dr. J. P. D. Leahy, of Napier Hospital (*N.Z. Medical Journal*, July 31st, 1901), has recorded some experimental results obtained by Piorkowski's urine-gelatin method of demonstrating the typhoid bacillus and differentiating it in plate cultures from those of *B. coli*. The method deserves great attention, in view of Piorkowski's statement that he has been able by this means to demonstrate the presence of typhoid bacilli in infected drinking water, and in the faeces of cases of enteric at a stage previous to the appearance of the Widal reaction, which, of course, is not usually developed until the disease has advanced a week or more. Piorkowski's method is thus described by Simon (*"Clinical Diagnosis,"* 3rd edition): Normal urine of about 1,020 specific gravity is allowed to stand until the reaction has become alkaline. It is then mixed with 0.5 per cent. of peptone, and 3.3 per cent. of gelatine, boiled for one hour and filtered immediately into test-tubes without any further application of heat. The test-tubes are closed with cotton-wool, sterilised for fifteen minutes in a steam steriliser at 100° C., and re-sterilised after twenty-four hours for ten minutes. To examine the faeces, one tube is inoculated with two loopfuls of the faecal material, which should

be as fresh as possible. From this tube, four loopfuls are transferred to a second tube, and a third is inoculated with from six to eight loopfuls from the one preceding. Plates are finally prepared and kept at a temperature of 22° C., as the presence of so small an amount of gelatine does not permit of exposure to higher temperatures. After sixteen to twenty-four hours an examination is made with a low power. At the expiration of this time the colonies of the colon bacillus appear as round, yellowish-brown, and finely granular specks, with well-defined borders, while the typhoid colonies show a peculiar flagellate appearance, from two to four fine colourless radicles usually, starting from a light, highly refractive central focus. After forty-eight hours the radicles have greatly extended, and after forty-eight to fifty-six hours the colonies are perfectly developed, and present a picture which strongly suggests the appearance of radishes, minute interweaving branches being given off in every direction. No difference can be observed at this time between typhoid and colon bacilli which have been grown as controls in 10 per cent. normal, or bouillon gelatine. Leahy's results certainly go to confirm the differentiating powers of Piorkowski's medium as a means of distinguishing between the typhoid and the colon bacillus, and he shows drawings and photographs which exhibit in a very marked manner the branched appearance given in the type-description as characteristic of typhoid colonies grown on this medium. He sums up his conclusions, tentatively, as follows:—(1) Piorkowski's is an extremely valuable method of diagnosing a case to be typhoid. (2) The earlier it is done in the course of the disease, the more likely it is to be successful. (3) The technique is very simple. (4) The higher the temperature at which the plates are kept without melting the better. He thinks, however, that at 22° C. the plates are too liable to melt, and that 20° C. answers sufficiently well. (5) Not every typhoid colony develops marked outgrowths. The nearer the temperature can be safely kept to 22° C., the more numerous are the colonies showing the outgrowths, and the more marked the outgrowths. (6) The typhoid colonies are often grouped. (7) *B. Coli* in pure culture as a control never shows anything like these phenomena of outgrowths.

Typhoid Bacilli in Blood of Typhoid Fever Patients.

Hewlett (*New York Medical Record*, November 30th, 1901), presents a summary of observations on the presence of typhoid bacilli in the blood of typhoid fever patients. The bacilli were obtained by cultivations from the blood of 90 out of 125 cases examined. The author's own observations were 24 in number, and 20 yielded the bacilli. The earliest positive results were obtained on what are believed to be the fourth and fifth day of the disease, and the latest on the twentieth day. The bacilli were rarely obtained after the fourteenth day, but there were relapses in three cases, in each of which the bacilli were forthcoming on the third, fourth, and fifth day of relapse, the tests having previously become negative. Cole, and also Auerbach and Unger have each reported one case in which positive results were obtained during the fourth week.

Mellin's Food Chocolate.—We have received from Messrs. Gollin and Co. a sample of this preparation which has quite recently been placed on the market. Analysis of this product shows it to contain only a comparatively small amount of proteid, viz., 6.55 per cent. and mineral matter, chiefly phosphates, amounted to 2.63 per cent. It is of excellent flavour, and is an agreeable food.

BRITISH MEDICAL ASSOCIATION NEWS.

PROCEEDINGS OF AUSTRALASIAN BRANCHES.

Ballarat District Branch.

THE Annual Meeting was held at Lester's Hotel Ballarat, on Thursday, January 30th, at 8.30 o'clock. Present:—Drs. G. Affleck Scott (President), Bennett, Champion, Courtney, Cussen, Davies, Hardy, Jordan, Martin, Mitchell, Morrison, Naylor, Pincock, Sleeman, Smith, R. Scott, Usher, and Wilson with Dr. J. Steel and Mr. Treloar as visitors. Apologies were received from Drs. McGowan, Palmer, Ross, and Salmon. Accounts amounting to £67 11s. 2d. were passed for payment. Correspondence was received from Miss Holthouse and the Rev. W. Potter.

On the motion of Drs. PINCOCK and CHAMPION it was resolved that no member of this branch either apply for or accept a position at Fremantle or Boulder, W.A., antagonistic to the Western Australia Medical Defence Association, and the hon. sec. was instructed to write to the Association to that effect.

A letter from Dr. MITCHELL shewed that a mining company had repudiated his claim for services rendered to a miner injured in their employment although he had been summoned to the accident by a representative of the company. The meeting agreed with the justice of the claim and advised its being insisted upon.

The PRESIDENT reported that negotiations were in progress with the Lunacy Department with reference to the Ballarat Asylum, and it was resolved to continue the agitation for the establishment of a receiving house in this district.

Drs. JORDAN and MORRISON moved "That this Branch disapproves of the proposal to form an Australasian Medical Association."

Drs. PINCOCK and R. SCOTT moved as an amendment "That the consideration of the question be postponed till we have more definite information on the subject." The amendment was carried by 12 votes to 4.

The Annual Report and Balance Sheet were received and adopted on the motion of the President seconded by Dr. Wilson.

REPORT.

"Your Council is gratified at being able to report continued prosperity of the Society, the membership standing at 36 as against 83 in 1901. The year which opened under the cloud of the death of our late lamented Queen Victoria has closed saddened by the loss, at a ripe old age, of Dr. Thomas Le Gay Holthouse, the first president of the Medical Society which has developed into this Branch.

"At this Annual Meeting you will be asked to consider the advisability or otherwise of forming an Australasian Medical Association to give the triennial Congress a more definite and permanent shape. A point to be debated will be whether such an Association should supersede the British Medical Association in the Commonwealth, or should merely be a subsidiary body for the consideration of scientific and ethical questions. Your decision will be placed before the Intercolonial Medical Congress to be held in Hobart next month.

"Many questions of great interest have been discussed at our meetings during the year, among them the pollution of Lake Wendouree. A deputation from the

Society was courteously received by the City Council, and our representations have already begun to bear fruit, as the Government is taking steps to abate the chief nuisance, which arises from the Lunatic Asylum. The Society is also endeavouring to induce the authorities to open our Lunatic Asylum for the reception of ordinary cases of insanity from this district and thus put an end to the anomaly of sending all lunatics from Ballarat fifty miles away to another asylum. We are hopeful of accomplishing this through the assistance of our local members of Parliament.

"The venerable Professor Virchow's eightieth birthday was not allowed to pass unnoticed by us. A sum of five pounds was subscribed by a few of our members and forwarded towards the testimonial fund, with the autographs of several members for insertion in the album.

"A Special Meeting of the Branch has been held to amend by-law No 10, in order more clearly to define the business of the ordinary quarterly meetings. This desirable amendment was further submitted to an ordinary meeting which confirmed the action of the special meeting.

"Your Council has pleasure in drawing your attention to the satisfactory state of our finances, which will make it possible in the near future to procure a home for ourselves where our library and museum might be stored. The former is at present packed away at the Hospital, and, as to the latter, in the past a large number of splendidly prepared morbid specimens have been thrown away after having been shewn at our meetings. Such exhibits might, in the future, be permanently saved had we some museum where they would be taken care of. We should, in this way, be accumulating a store of pathological facts which would be of increasing interest and value from an educational point of view.

"The original papers read this year, although fewer than on former occasions, have been of a high order of merit, and evoked considerable interest.

"The following is a list of the papers:—

Notes on Strabismus.—G. Affleck Scott.

Discussion on the Treatment of Typhoid Fever.—Introduced by J. T. Mitchell.

An obscure case of Cerebral Injury.—T. A. Wilson.

Notes on a case of Mediastinal Sarcoma.—E. Champion.

Discussion on Hon. Medical Appointments to Societies and Athletic Clubs.—R. D. Pincock.

Discussion on Flinsen Phototherapy.—R. D. Pincock.

Some cases of Perforating Gastric Ulcer.—G. E. Cussen.

Resumé of interesting cases met with in General Practice.—W. Morrison.

The retiring PRESIDENT then gave an address upon "Specialism in its relation to general medicine and surgery," illustrating his subject lucidly and forcefully from the side of ophthalmic practice (see page 55).

Dr. G. AFFLECK SCOTT then vacated the chair, and introduced his successor, Dr. W. Beattie Smith, who was heartily welcomed, and he suitably responded.

Drs. PINCOCK and WILSON moved that a cordial vote of thanks be accorded to Dr. Affleck Scott for his address. This was carried, with prolonged acclamation.

The PRESIDENT then declared the following officers elected in the absence of any opposition:—Vice-president, J. F. Usher, M.D., L.A.H.; Hon. Secretary, J. T. Mitchell, M.D., M.R.C.S.; Treasurer, H. E. Salmon, M.B., Ch.B.; Members of Council (2), Robert Scott, M.D., Ch.M.; C. H. Courtney, L.R.C.P., L.R.C.S.

Drs. SCOTT and SLEEMAN moved that the thanks of the Branch be accorded to the retiring auditors, and that they be re-elected.

Dr. Mitchell's paper on "A Case of Cesarean Section" was taken as read on account of the lateness of the hour. (Reported at p. 71).

Drs. PINNOCK and USHER moved: "That in the opinion of the members of this Branch of the British Medical Association, it is not conducive to the interests of the profession for any member to accept or hold the position of honorary physician, surgeon, or medical officer to any club or society which is not on a philanthropic basis." Considerable discussion ensued, in

which it was stated that the South Australian Medical Defence Association had carried a similar resolution recently. The motion was carried by a substantial majority.

Dr. R. SCOTT shewed a skiagram of a child in whose œsophagus a tobacco tag was impacted, which foreign body was subsequently passed per rectum.

The meeting then closed, and the members were entertained at supper by the retiring President, Dr. G. A. Scott.

RECEIPTS AND EXPENDITURE FROM JANUARY 31st, 1901, TO JANUARY 30th, 1902.

Dr					Cr.				
		£	s.	d.		£	s.	d.	
To Subscriptions to Victorian Branch	...	63	1	0	By Balance, January 31st, 1901	...	0	5	8
" Printing and Stationery	8	0	0	" Members' Subscriptions	...	70	7	0
" Wreath	1	1	0					
" Bank Charges	0	5	0					
" Petty Cash...	1	15	8					
" Balance in Union Bank...	1	10	5					
		<u>£70</u>	<u>12</u>	<u>8</u>			<u>£70</u>	<u>12</u>	<u>8</u>

Fixed Deposit Receipt in Union Bank ... £84 16 2

Examined and found correct,

R. A. CUE,
F. G. HAYMES, } Hon. Auditors.

January 22nd, 1902.

H. R. SALMON, Treasurer.

JAMES T. MITCHELL, Hon. Secretary.

New South Wales.

THE Council met at the offices of the Association on Friday, 10th January, at 8.30 o'clock. Present:—Drs. Bennie, Todd, Crago, Hankins, Hinder, Worrall, Abbott.

Letter from the General Secretary of the Australian Natives Association, asking for a conference with representatives of his Society.

Resolved—"That the Council does not see its way to comply with the request of the Directors of the Australian Natives Association for another conference."

Letter from B. A. Price, Esq., M.P., enclosing proposed bill for the amendment of the Medical Bill.—To be acknowledged, and Mr. Price thanked.

Accounts passed:—Rent £13 13s., and refreshments £1.

Profit of *Gazette* for the year:—£235.

The Council met at the Association Rooms on Tuesday, 28th January, 1902, at 8.30 o'clock. Present: Drs. Foreman, Worrall, Crago, Hinder, Bennie, Jamieson, Brady, and Hankins.

The minutes of the previous meeting were read and confirmed.

The statement of accounts for the Branch showed a credit balance of £203 11s. 6d. for the year.

Correspondence from the Inverell Lodge, M.U., submitting draft agreement for the consideration of the Branch was received.

Resolved—"That the Council, after careful consideration, deem the agreement submitted unsatisfactory in many particulars. The Council will not consider any further alteration in the agreement until it is first

submitted to the medical men of Inverell and approved by them."

Correspondence from the Australian Natives Association was read, agreeing to the income limit of £200 per annum.

Resolved—"That a general meeting of the Branch be convened for the purpose of considering the matter, early in March, after the Medical Congress in Hobart."

Letter from the General Manager of the Australian Mutual Provident Society was read with reference to the reduction of medical fees for examinations in life insurance.

Resolved—"That the Hon. Secretary be instructed to write to the Secretary of the Australian Mutual Provident Society, stating that the matter contained in the General Manager's letter of 22nd January had been placed before the Council, and that it was the unanimous opinion of the Council that the proposals therein contained could not be entertained."

Queensland.

A CORRECTION.

IN the report of the discussion at a meeting of the Queensland Branch of the British Medical Association on the proposed boycott of the medical officers of the Brisbane Friendly Societies Medical Institute, see *Australasian Medical Gazette* January 20th, 1902, page 85, Dr. Lockhart Gibson is reported to have said: "He was personally of the opinion that a medical man should not agree to act upon the staff of a hospital which had upon its staff a member of the profession who was in the habit of meeting in consultation medical officers connected with the Institute." This

should read: "and if ostracism were decided upon, it should be carried out by every member of the Branch and should apply to hospital as well as private practice."

A MEETING of the Branch was held on Friday, February 7th, at the rooms, Treasury Buildings, with the following attendance:—Dr. P. Bancroft (President), The Hon. W. F. Taylor, The Hon. C. F. Marks, Drs. Hopkins, Wild, J. Thompson, Robertson, Hawkes, Lockhart Gibson, Wilton Love, Hardie, Flynn, Turner, Cameron, Culpin, Francis, Hirschfeld, McEvoy, Lightoller, Clowes, Orr, Macnamara, Webb, Carvoso, Espie Dods, Halford, Salter, and Brockway (hon. sec.) Visitor: Dr. Peverley.

Dr. McEVoy related that he had recently attended a confinement in which the mother was 13 years of age, the grandmother 29, and the great grandmother 48.

The PRESIDENT welcomed Dr. Turner on his return from England.

The minutes of the last general meeting and of a special meeting were read and confirmed.

Dr. SALTER was elected a member of the Branch.

A discussion took place on the ratification of the resolutions passed at the last meeting, and was adjourned until the next meeting.

The SECRETARY read a paper contributed by Dr. AENEAS McDONNELL, of Toowoomba, on "Intussusception." (To appear in a future issue).

Dr. J. THOMSON was elected representative of the Branch at the approaching Intercolonial Congress.

South Australia.

USUAL monthly meeting was held at University at 8 p.m., on Thursday, 30th January, 1902. Present: Drs. Todd (president), J. C. Verco, Watson, A. Wigg, Harrold, F. Magarey, Lendon, Corbin, Symons, Stirling, Austey Giles, E. A. Johnson, Plummer, Cavenagh-Mainwaring, Cudmore, Smeaton, Marten, A. A. Hamilton, W. Hayward, Brummitt, Gault, Poulton, Scott, and Gunson (Hon. Sec.) Visitor, Dr. Snow.

Minutes were taken and read signed.

Correspondence read from West Australian Branch.

After much discussion, it was moved and carried that our representative at Hobart Congress should invite Congress to hold the 1905 session in Adelaide, if for any reason the West Australian invitation were not decided upon. Members present at Hobart were asked to first support the West Australian invitation.

Election. Dr. Alfred Alexander Smith, of Clare, South Australia, was duly elected a member.

The following motion was carried after discussion: "That this Branch is unfavourable to the formation of any Association which would interfere with the continued success of the British Medical Association in its Australasian Branches, and is further of opinion that annual meetings of Congress would be undesirable."

Various pathological specimens were shown by Professor Watson, Drs. Wigg, and Cavenagh-Mainwaring.

PATHOLOGICAL EXHIBITS.

Specimens shown by Professor A. Watson.

1. *Pelves from three cases of extroversion of the bladder.*

(a) Girl *æt.* 8. The pelvis resembles that of a bird, as the pubic bones are widely separated (three and a quarter inches), and the sacrum almost straight. The vesical ends of the ureters were transplanted into the upper portion of the rectum, and override the fundus uteri. It is difficult to estimate the result of this had the patient grown up and become pregnant.

(b) Boy *æt.* 15. The so-called extra peritoneal method was tried in this case by means of a forceps pushed through the anterior wall of the rectum. (The kidneys on the right side had been removed several years previously, as a preliminary step in another type of operation devised by Mr. Harrison). The separation of the pubic bones is proportionately less than in the case of the female. The sacrum is less straight.

(c) Male infant, *æt.* six weeks. The trigonum vesicæ was transplanted into the sigmoid flexure by the intra-peritoneal method as practised by Madyt. There was no leakage in this case such as occurred in the other two, but the tender age of the patient militated against its recovery. (For Dr. Lendon.)

2. Pyloric third of stomach with malignant stricture and infected glands removed according to the original Billroth method, from a gentleman *æt.* 60 who walked upstairs unassisted thirteen days later. There was no preliminary washing out of the stomach which was first relieved of its acrid accumulation after it was opened. (For Dr. Angus Johnson.)

3. Shark-embryo washed ashore in its horny shell during the recent storm. Dr. Johnson removed the shell to demonstrate its vascular connections with the yolk sac and its down-like external gills. (For Dr. Angus Johnson.)

4. X-Ray photo of an irreducible fracture dislocation of the astragalus of an old woman. (For Mr. A. G. Freyett.)

5. Calcified sebaceous cyst the size of a shut fist extruded by ulceration from the right genito-crural fold of a spinster *æt.* 95, who died of exhaustion. It first became apparent in the days of Astley Cooper and Benjamin Brodie, and should have been removed, as its presence probably caused her to remain unmarried. (For Dr. Humphrey Marten.)

6. Rupture of common hepatic duct by pressure of a huge monocystic hydatid of right lobe of liver in a lady *æt.* 40 who died of peritonitis. Medical advice was not sought till after the fatal rupture had occurred. (For Dr. A. A. Hamilton.)

Dr. ANGAS JOHNSON showed: Egg of heterodontus philippi, or Port Jackson dog shark, which was washed up from the sea in the recent storm. The outer covering of the egg is cone shaped, and consists of chitin; free communication is allowed with sea water at the top, through a cleft, the bottom being firmly sealed. On opening this cover a small shark was seen firmly attached to its yolk sac, which was of the size of a mandarin. The specimen was mounted in formalin-glycerin, which showed it in its natural colours.

Also, the Philosophical Transactions of the Royal Society of London for 1901. "Contributions to the Comparative Anatomy of the Mammalian Eye, chiefly based on Ophthalmoscopic Examination," by George Lindsay Johnson, M.D., F.R.C.S.

The author has been working at the subject for the past eight years, and the above production is the herald of a big atlas of 600 plates, which will later be produced. The difficulties of this work have been enormous when one considers that all available animals have been examined, *e.g.*, lions, bears, elephants, seals, boa constrictors, etc., etc., the seal's eye being examined under water, while the author had on a diver's dress.

Chromolithographs of the back of the eye, by A. W. Head, F.Z.S., have been reproduced. Animals that have been a puzzle to zoologists can now be arranged in their proper families and genera, *e.g.*, Coquerel's lemur, hitherto placed among the lemurs, has now been proved to be a galaso; the rodents are placed very low in the scale of mammals, nearly as low as marsupials.

These results have also been confirmed by Professors Gadow and Haeckel.

Also curious appendages in mammals which have been christened the "umbroculum." This is a kind of flap proceeding from the iris used as a shade.

Also a theory is advanced for the physiology of vision. A new line of investigation has been taken up, i.e., the measurement of the divergence of the axes of the eyes.

The apteryx has been shown to have a pecten, although all observers, including the great Sir Richard Owen, said it had not.

The above is but a poor critique of the work, which must be seen to be appreciated.

The meeting then terminated.

REPORT OF SOCIETIES.

The Eastern Suburbs Medical Association of Sydney, N.S.W.

THE members of the above association entertained two of their number to a "Welcome Home from South Africa" Dinner at Aarons' Exchange Hotel, Sydney, on December 5th, 1901. The guests of the evening were Dr. C. A. Edwards, of Waverley, and Dr. J. Adam Dick, of Randwick, both of whom had served with the New South Wales A.M. Corps in South Africa. The chair was occupied by the President, Dr. Walton Smith, and amongst those present were: Drs. G. Lane Mullins, P. J. Collins, F. W. H. Quaife, W. J. Barkas, Burge, Ludlow and others, and one visitor, Colonel Williams, P.M.O. of the N.S.W. forces. The toasts were "The King," "Our Guests," "The Visitors," "The Chairman." The invitations to the guests were beautifully illuminated and framed cards in picture form, executed by Mr. John Sands, of Sydney.

On January 16th, 1902, a general meeting of the above association was held at the meeting room, Paddington Town Hall. Present: Dr. Walton Smith, president, in the chair, and a number of members and visitors. The business of the evening was a paper from Capt. C. A. Edwards, N.S.W. A.M.C., upon his "Experiences in the South African Campaign." Dr. Edwards briefly mentioned his itinerary, and gave an account of some interesting ambulance work, and described many remarkable surgical and medical cases. He also touched upon the game of the country, and concluded by reciting several amusing anecdotes. Capt. R. E. Roth, D.S.O., also contributed to the discussion. A hearty vote of thanks was unanimously accorded to Dr. Edwards for his most interesting paper. A similar vote was accorded to Dr. Roth for his contribution to the discussion. Refreshments were afterwards served, and the meeting terminated at 11 p.m.

Sydney and Suburban Provident Medical Association.

A SPECIAL meeting of the General Committee of the Sydney and Suburban Provident Medical Association was held at 121 Bathurst Street, Sydney, on 7th February, 1902. Present: Dr. West (in the chair), Drs. Jamieson, Hankins, Litchfield, Levy, Doak, O'Gorman Hughes, J. M. Gill, Palmer, Crago, Binney, and O'Hara.

The minutes of the preceding meeting were read and confirmed. The Chairman explained that the meeting had been convened to consider the proposal of Mr. Rafton to form a Medical Benefit Association to be entitled the Commonwealth Medical Benefit Association.

After some discussion it was unanimously decided that the proposal could not be entertained.

OBITUARY.

CHARLES FERDINAND EICHLER, M.D., M.R.C.S., L.R.C.P., L.S.A. LOND; SYDNEY.

Charles Ferdinand Eichler, M.D., M.B.C.S.E. late of Bridge Street, Sydney, died on January 10th, 1902, from senile decay at the age of 80.

Dr. Eichler was one of the oldest medical practitioners in Sydney, where he has been following his profession for close on half a century. For many years he was honorary visiting surgeon to the Sydney Hospital, and for a quarter of a century he was associated with the Deutsche Kranken Verein, from whom he received a handsome testimonial on his retirement. Dr. Eichler was one of the founders of the Sydney German Club. He was a very old member of the Royal Society of New South Wales, and was associated with, and a Past Master of the Masonic Lodge Germanic.

Dr. Eichler came to New South Wales in charge of an emigrant ship over 50 years ago. He was married 49 years back to Miss Louisa Kurtz, companion and governess in the family of Sir Charles Fitzroy, the wedding taking place from Government House.

The doctor was an enthusiast in rose-growing. Some 80 years since he purchased an estate at Marrickville, which he named Rosenau. On that estate he had close on a thousand varieties of roses under cultivation, many of which he had imported from Europe.

He was an unassuming man, well-read, and could converse in eight languages.

His wife, four sons, three daughters, and 19 grandchildren survive him. The funeral took place at the Waverley Cemetery.

ALEXANDER STEWART PATERSON, M.D. EDIN.; ADELAIDE.

Dr. Alexander Stewart Paterson, who filled the offices of Colonial Surgeon and Resident Medical Officer at the Adelaide Lunatic Asylum for many years, died suddenly on 6th January, 1902. He had not enjoyed good health for a considerable time, but the news of death was quite unexpected.

He received his medical training at Edinburgh University, and he came to Australia immediately after he had completed his studies. He became L.R.C.S., Edinburgh, in 1856, and obtained his M.D. degree in the following year.

In 1863 he was appointed medical officer to the Lunatic Asylum in Victoria, and filled the office for about four years. In April 1867, he was appointed to the post of Resident Medical Officer of the Adelaide Lunatic Asylum, a position which he filled for nearly 30 years. In 1870 he was gazetted Colonial Surgeon, and retained the title until 1896, when he severed his connection with the Government service.

Dr. Paterson was deeply versed in all matters relating to the treatment of mental diseases, and was recognised as an authority on insanity in all its phases. He

also acted as medical officer to the Adelaide Gaol for several years. He was for several years a prominent member of the Central Board of Health and of the Medical Board. He has left a widow, five daughters, and two sons.

Dr. D. J. Williams, one of the oldest medical practitioners in Victoria, died at Queenscliff on Saturday, 18th January, 1902, after a long illness, in his 84th year. Deceased was one of the oldest justices of the peace in Victoria. He was one of the first councillors of Queenscliff, and had filled the office of mayor.

We regret to record the death of Henry Ray, Ch.M., L.R.C.P. et S., which took place suddenly at Jolimont, Melbourne, on 31st January, 1902. The cause of death was heart disease. Deceased was the son of the late Dr. Robt. Ray, of Collins Street, Melbourne, and he leaves a widow and two children.

CORRESPONDENCE.

London.

(FROM OUR OWN CORRESPONDENT.)

The Army Medical Service—The Prevention of Tuberculosis—St. Bartholomew's Hospital—Smallpox in London—The General Medical Council—Therapeutic Institutions.

It is rumoured that a Royal Warrant is about to be issued for the carrying into effect of Mr. Brodrick's scheme for the reform of the medical services of the army. Unless this scheme as originally promulgated has been subjected to very considerable modifications it will ignominiously fail in its object. There has been abundant evidence that it has been received by the Royal Army Medical Corps itself with a feeling of disappointment, and it is almost universally condemned as unworkable by those outside the service who are best qualified to judge of its merits.

The system, on which it is based, of promotion by examination is one of the worst conceivable and will almost inevitably ultimately result in the highest posts being occupied by officers who, however expert in book knowledge and laboratory technique will not necessarily possess either administrative capacity or executive skill for the solution of problems concerned with the sanitary and general medical management of armies in the field. There are, moreover, so many anomalies in the matter of pay and promotion that, apart from the examination test which is to be supreme and is of itself enough to wreck the scheme, the conditions of service will in no sense be improved, and will fail to attract either the class or number of men who are so urgently needed.

The Council of the National Association for the Prevention of Consumption held a meeting on November 11th, at which the following resolution, brought forward by Dr. Nathan Raw, was unanimously adopted:—

"That, in the light of our present knowledge, the time has now come, when the whole question of tuberculosis, including treatment of suitable cases in municipal sanatoria, should be undertaken by the municipal corporations and county councils throughout the country."

It is doubtful whether the times are propitious for the general adoption throughout the country of a scheme which would necessarily involve serious additions to the rates; and it also may be questioned whether municipal corporations and county councils, as

they are at present constituted, are suitable public bodies to be entrusted to the prosecution of the new campaign against phthisis and other forms of tubercular disease.

On December 3rd, the Prince of Wales was ceremoniously installed as President of St. Bartholomew's Hospital. Sir Trevor Lawrence introduced the new President, and, in speaking of the past history of the Hospital, referred to the fact that the foundation had always maintained an unbroken connection with the Crown. He reminded his audience of the exceeding interest which their late President, now His Majesty the King, had always taken in their work, and congratulated them on the prospect of having that Royal interest upheld by the King's successor in their presidential chair.

The present epidemic of smallpox is unfortunately showing no signs of diminution, the number of cases under treatment in the hospitals of the Metropolitan Asylums Board having on the 2nd December reached a maximum of 459. The advent of cold weather has not brought about the expected decrease in the notifications, the number of which have been 16, 31, 28, and 33 for the 1st, 2nd, 3rd, and 4th of December respectively.

This epidemic has abundantly verified the experience of former outbreaks that the protection of vaccination lasts only for a few years, and that if the immunity from the disease acquired in infancy is to be maintained revaccination is imperative.

Though the people of London have sought the protection of revaccination in large numbers, it is to be feared that their still remains a considerable residuum of the population who, either from carelessness, "conscientious scruples," or "cussedness" has omitted to range itself on the side of safety. This non-compliance with the only, and now-a-days absolutely safe means of prevention, constitutes a serious menace to the community at large, and is a painful testimony to the legislative un-wisdom which sanctioned a repeal of the compulsory clause in the Vaccination Acts. Owing to the difficulty often experienced in recognising the early stages of the disease, and the disastrous consequences which are apt to ensue from errors in diagnosis, the Borough Council of St. Pancras have recently adopted two commendable safeguards. They have made chicken-pox a notifiable disease within the Borough, and they have appointed, to act as medical referee in each ward, a practitioner whose services may be requisitioned by the ordinary medical attendant on any suspicious case. It will be interesting to observe how this plan works out in practice.

The proceedings of the Winter Session of the General Medical Council came to an end on Tuesday, the 3rd December. Sir William Turner, whose term of office expires this month, was unanimously re-elected to the Presidency for a further term of five years.

The business was not, on the whole, of great consequence, but none the less, seven days were occupied in its transaction. One of the leading items on the agenda was the case against Mr. Robert Rendall, M.B., C.M., Edin., of Great Yarmouth, against whom the following charge was formulated: "That you have been guilty of infamous conduct in a professional respect, particulars of which are that you accepted and continue to hold the appointment of medical officer to the Liverpool Victoria Friendly Society at Great Yarmouth, a society which systematically practises canvassing for the purpose of procuring patients, and that you have approved or acquiesced in such canvassing."

The prosecution was conducted by Dr. R. G. Bateman on behalf of the Medical Defence Union, while Dr. Rendall was represented by Mr. Lawson Walton, K.C.

M.P., and Mr. Charles Matthews. The Council, after deliberating in *camera*, decided that the facts alleged against the respondent had been proved, and, while admonishing him, gave him until next session to consider his position. This decision is, in the interests of the profession, heartily to be approved, and has a far-reaching importance. If Dr. Kendall, between now and next May, severs his connection with the Liverpool Victoria Friendly Society, no further steps will be taken against him, but the Council's decision establishes a precedent which must in the future deter practitioners from associating themselves with that class of Medical Aid Association, whose *modus operandi* is such that the difference between the income acquired from the weekly pittance collected from the poor, and the miserably insufficient salary paid to the unfortunate medical man who consents to do their work means revenue to the Association and percentage profits to those who run it. As commercial speculations, such institutions may be legitimate enough, but much of their success is attributable to the philanthropic flag under which they sail, and the position of their medical officers, who are little more than business assets on which the profit and loss account has entirely to depend, is obviously one which is inimical to the veriest rudiments of professional ethics. The Medical Defence Union is to be congratulated upon this successful issue to a case involving such important principles.

Another case of some interest in which certain practitioners were charged with employing as assistants for the sale of scheduled poisons, persons unqualified as pharmaceutical chemists, fell to the ground in virtue of an apology offered on the part of those charged with a breach of the Pharmacy Act, which they had committed unwittingly.

How far medical men should be allowed to compete with chemists in the sale of ordinary drugs is still an unsettled point and one which must in great measure be decided by every man for himself according to his views and circumstances, but there can be no question as to legality of poisons being sold except by those who are duly licensed.

The subject of the powers of the Council with regard to courses of study and the recognition of institutions in which such courses may be taken gave rise to animated discussion, and was ultimately referred to a special committee to consider and report.

Dr. Dawson Williams, the Editor of *The British Medical Journal*, recently delivered to the Reading Pathological Society, on the occasion of its sixtieth anniversary, a striking and prophetic address on the subject of Sanatoria. He called attention to the fact that the recent extraordinary multiplication of institutions in this country for the cure of consumption was a vivid illustration of the response which had been afforded by the public to the system of disease-treatment away from home in well-appointed houses, where a disciplinary method of management is adopted and intelligently directed to every detail of the patient's daily life by skilled medical supervision. Such institutions, though long existing abroad, have only recently "caught on" here, and though there is some reason to fear that the recently awakened enthusiasm for the open-air method of treatment of phthisis may lead to a supply in excess of any legitimate demand, the fact that they have been so extensively patronised gives point to the force of Dr. Williams' prognostication that the day is rapidly coming when "more poor-law patients will be treated in institutions, more persons of the artisan and lower middle class will be treated in sanatoria at low rates, and

more people of the wealthier class will go for the treatment of chronic disease to sanatoria, where at various rates of payment they will obtain the quiet or society, the rest from household anxieties, and the systematic treatment by diet, exercise, physical methods, and by drugs which they need." There can be no doubt in the minds of medical men that not only tuberculosis but every other variety of disease would be better managed and yield a higher and more speedy recovery ratio if such a system of sanatorium treatment were to become the fashion, but it may be doubted whether any extensive development in such a direction would be to the benefit of our profession. It would have superlative advantages for persons of limited means, whose home circumstances and financial resources are ill adapted to the strain of long illness; it would also ensure obedience to orders and immunity from the irresponsible interference of the fond, though foolish, friends and relatives of every patient whether of high or low degree: but were it to be widely adopted by all classes of society the aggregate loss to the general knowledge and yearly revenue of the general practitioner might more than ever seriously handicap him from the point of view both of experience and of the necessary wherewithal to live. Dr. Williams does not think that the effect need necessarily be injurious, but that, on the contrary, such a movement, if well directed and carefully guarded from the avaricious ambition of the company promoter and capitalist, will redound not only to the greater benefit of suffering humanity, but also to the ultimate greater influence and power for good of both medicine and surgery. Whether public opinion either at home or in the Colonies is yet ripe for such a development, the day is foreshadowed in this suggestive address when the advantages of treatment for all kinds of ailment in a well equipped "home" will command the attention of the public and leave the profession no choice but to progress with the times.

London, December 13th, 1901.

Victoria.

(FROM OUR OWN CORRESPONDENT.)

Deaths under Chloroform—Case of Brain Injury—Lodge Matters at Williamstown—Expenditure at Melbourne Hospital.

THE prevalence of deaths during the administration of chloroform still continues, and since my last letter either has been blamed for the death of one case. Apparently, the medical man who made the autopsy did not agree with this opinion, for his evidence made it appear that the death was due to shock following upon a serious and dangerous operation.

Another death occurred whilst chloroform was being administered, and this time at the St. Vincent's Hospital. In this case the sufferer was a farmer, aged 45 years, who had been suffering from diseased bone in the arm. The symptoms were of the usual type recorded, viz., after the administration of a certain amount of anæsthetic the patient began to struggle violently, and then after the administration of a little more he suddenly ceased to breathe. The usual remedies were unsuccessfully tried to revive the patient, whose heart, according to the evidence, continued to beat for nearly one hour and 20 minutes. The cause of death, in the opinion of Dr. Stawell, who made the autopsy, was dilatation of the heart and heart failure.

The feeling of insecurity such cases as these give the public must have a highly prejudicial effect upon patients who may have to undergo operations, and it is a great pity that the publication of every death under big headings in the daily journals should be countenanced, as it does no good to the profession or to the public. Many times operations are only undertaken "in extremis" in the forlorn hope of saving life, and death, under such circumstances, should hardly be ascribed to the anæsthetic. There is no doubt that the administration of chloroform should only be undertaken under the direction of an experienced anæsthetist, and no cases, in hospitals particularly, should be operated upon without this direction except in great emergencies.

Mr. Agar Wynne, Solicitor-General for Victoria seems (?) to understand the whole matter, and puts it in a nutshell, viz., "That the patients are smothered by the mask." According to the *Herald*, dated 20th January, 1902, Mr. Wynne states that he has studied this question of chloroform administration, and the result of his studies was the opinion given in the preceding paragraph. He also states in the same paper that he has given instructions that, in future, at all inquests on persons who have died under chloroform, the Government shall be represented by a "competent man," who will endeavour to ascertain if anyone was to blame in connection with the fatality.

The Solicitor-General further informed the *Herald* representative that he had some little experience of the use of chloroform himself, and that it was perfectly safe when applied intermittently on a handkerchief. He had used it many times in this way, and had seen it used for a great number of years without accident, and, he observed in conclusion, that it was "only in hospitals"—where mask inhalers were used—that one ever heard of a death under chloroform.

Mr. Agar Wynne apparently understands more about medical matters than the profession itself, and the poor, long-suffering practitioners are again being taught by a layman how to carry on their business.

If Mr. Agar Wynne were to appoint a medical commission to consider the question of the administration of anæsthetics, he would be doing better work than by giving his own opinions on these matters.

In private practice mixed anæsthesia is coming much more into vogue, and certainly seems, so far, to have proved very successful, for no deaths have been reported under such circumstances, to the best of my belief, for the last few years.

An extraordinary case of brain injury occurred recently to a boy aged five years. He accidentally fell from a railway carriage on the Gippsland line, and was picked up in an unconscious state, and conveyed to the Children's Hospital, Carlton, where he remained unconscious for 67 days, and then died.

No settlement has been arrived at between the medical practitioners at Williamstown and the Rechabite Lodge so far, and the matter has been postponed for another three months in order to give time for unanimity and friendly arrangement on both sides.

The expenditure per bed per year in the Melbourne Hospital was stated to be £74 11s. 5d., or £10 4s. 8d. more than the average of the six hospitals which had been selected for comparison, viz., the Sydney, Prince Alfred (Sydney), Brisbane, Adelaide, Alfred (Melbourne), and the Melbourne. At a meeting of the committee of the Melbourne Hospital, the *Argus* proprietors were complimented for having, at their own expense, conducted an investigation into the expenditure of this Hospital. This seems a peculiar position for a committee of a hospital, who are

supposed to manage and control its expenses, to take up. To an outsider, it would naturally appear as if the committee were not capable of conducting its own affairs, when it has to look for outside help for such a purpose as this.

Mr. Andrews, the Secretary of the Melbourne Hospital, stated that the expenditure was greater in the Melbourne Hospital than in others, because the number of in-patients per bed occupied is greater in the Melbourne than in any other institution. The higher expenditure for provisions is due to the higher prices of groceries and meat.

South Australia.

(FROM OUR OWN CORRESPONDENT.)

Adelaide Hospital—Dentists' Bill—Amendment of the Vaccination Act—Administration of the Public Health Act—Medical Defence Union.

THE history of the past year here can hardly give unqualified satisfaction to those interested in medical progress. It is true that there is food for thankfulness in some directions. The return of the old staff to the Adelaide Hospital early in the year has, as was hoped, gone a long way towards closing the breach that has existed for so long, and has enabled medical students once more to complete their course here. With the appointment of a medical superintendent and five house surgeons during the past week a further step has been taken toward a return of the old order of things.

The introduction of a Dental Bill into the local House of Assembly last session was also a step forward. This State has long been the happy hunting ground of unqualified dentists, and the proposed Bill, based as it was on similar Acts in the other States, would have gone a long way towards bringing about a better condition of affairs in the future, while duly conserving the rights of those already in the field here. The "anæsthetic clauses" in particular were a praiseworthy effort to bring the administration of anæsthetics under proper and qualified supervision. Unfortunately the Bill was introduced too late in the session to be carried through, but better success may be hoped for during the coming year.

On the other hand, the Compulsory Vaccination Act has been amended by the introduction of the conscience clauses of the English Act, without, however, any limit being placed on the period for which the experiment is to be tried. This in itself is not so serious a matter as the sentiment at the back of the change; the daily papers openly term it the abolition of compulsory vaccination, and the letters of the general public prior to the introduction of the Bill and the speeches of legislators during its passage through Parliament both revealed a very strong feeling against vaccination, combined in most cases with a very imperfect knowledge of facts concerning it.

A similar unhealthy state of public opinion was revealed in the public discussion that ensued, on Dr. Borthwick's attempt to secure the better administration of the present Health Act. It was clearly shown that the vital clauses of the Act were not being enforced, and that the hoped-for benefits had not been realized through the administrative bodies spending their time searching for grievances and difficulties instead of attempting to carry out the spirit of the Act. But it was just as clearly shown that many of the local bodies were determined to resist any attempt to enforce the Act, and that a section of the community were much more impressed with the grievances of individuals than with the welfare of the many. For a time it looked as if

the only result of the discussion would be to cause the repeal of the Act altogether!

These facts clearly show that the prime necessity in the immediate future is to educate the public more thoroughly in public health matters. It becomes a serious question whether an attempt must not be made to do this through the daily press. At present, practically the only medical information the lay public get in their papers is sensational paragraphs on the cure of cancer by Röntgen rays or violets; or the experiences of a man with a gastric fistula, or some such supposed wonder of surgery. A number of cases of individual hardships, whether it be from quarantine or vaccination, or the cleaning of a dirty milkshed, have full publicity given them, and sooner or later an agitation arises on one of these subjects. Any facts put forth at such times by medical men carry little weight. Their evidence is regarded as biased and is discounted accordingly. Yet, these are about the only occasions at present when we attempt to put the facts on these matters before the public. The periodical contribution of a column of notes and authoritative facts would do much in the way of improving matters.

The Medical Defence Union of this State held its second annual meeting in December, and by its report showed it is accomplishing useful work in a quiet way. Membership has been well maintained, and there is now a substantial bank balance. Both in the report and at the meeting stress was laid on the decision of the council that £1 ls. should be the minimum fee for insurance examinations. The necessity for this was shown by a circular issued the next week by the Temperance and General Mutual Life Assurance Society asking medical men to examine those insuring for a small sum for 10s. 6d. A great show was made of a less complete form to be filled in, but a casual inspection revealed that the answers for this form required just as complete an examination as ever. It is to be hoped that a united effort will be made to defeat this move.

The Proposed Australian Medical Association.

(To the Editor of the *Australasian Medical Gazette*.)

SIR,—As the member dissenting from the resolution passed at the meeting of the New South Wales Branch of the British Medical Association, which condemned the proposal to discuss the formation of an Australian Medical Association, I would ask leave to state my reasons for doing so. It is probably true that self-interest governs all our actions, and the members of the Branch have jumped to the conclusion that their interests were best served by the maintenance of the *status quo*. And the parochial spirit, which views with distrust any suggestion of change coming from an outside source, was not wanting. I am convinced that an attitude which refuses even to discuss in open court any subject, and prejudices it in ignorance, is an altogether unreasonable one, and one not calculated to gain for us the intellectual respect of the medical profession in the other States.

It would appear from the discussion at the meeting that there were no arguments to be adduced in favour of such an Australian Medical Association. The Executive Committee of the Inter-State Congress evidently think differently, and it would only have been courteous to have withheld an expression of opinion until their proposals were made public. And this all the more because any abstract resolutions

passed at the Congress could only have an academic value. As in the case of political federation, I opine that any resolutions passed at the Congress would be submitted to the various State Medical Associations, and that the final appeal would be by plebiscite to the medical profession in the different States, and that only by majorities in each and all of the States could such resolutions become binding. By such a procedure absolute liberty would be accorded to the medical profession in each State. And are there no arguments in support of medical federation in Australia? It is seemingly held that this federation would necessarily be antagonistic to the connection with the British Medical Association. This has not been proved. Anyone is at liberty to propose that the federation should be a union of all the State Branches of the British Medical Association, this to form an Australian Branch of the British Medical Association, with State Branches retaining a certain amount of autonomy.

And if this be impracticable, it remains for us seriously to discuss whether the connection with the parent Association is of sufficient value to outweigh the advantages arising from an Australian federation. The connection with the British Medical Association is, after all, mostly one of sentiment. Let it be granted that the parent Association is a great and powerful body, but let us also realise that it can do little or nothing for us in Australia. It provides us with the *Journal*, it extends a courteous welcome to Australian delegates at the annual meetings; beyond this, I do not know what it can do. But the profession in Australia has to work out its own destiny, and no outside influence can avail it in the least.

My desire is to see an Australian Medical Association, not a mere dilettante body meeting occasionally for discussion and recreation, but an organised fighting union presenting an unbroken front to all attacks upon its rights and privileges, and, on occasion, carrying the war into the enemy's country.

The condition of medical men in Australia is, in many ways, deplorable; in the not far distant future it looks as if it would be worse. One need not be a pessimist to predict this. The ranks of the medical profession are being increased every day, the general population is practically at a standstill. It follows from this that incomes all round must be decreased. But the true inwardness of the situation is this—that the increase in the number of medical men offers the opportunity to the Friendly Societies, and other sweating organizations to seek to make their own terms with their medical attendants. Heaven knows the position is bad enough already. What will it be if a *sauve qui peut* sets in, and every man finds himself competing against his fellow for bare existence? And we are the trustees of the future, and owe an account of our stewardship to those who will follow in our footsteps. We have no right to act on the principle that as long as things suit us at present the deluge can come after us for all we care.

The question of contract practice requires to be gone into all over Australia. We have no General Medical Council, whose pronouncements carry legal effect. Our own salvation must be worked out by ourselves, and this can only be done by strenuous organisation; the accumulation of what we not need hesitate to call "strike funds," and the rigid application of the boycott. This is the only weapon the medical profession possesses, but it is a very effective one. Under an Australasian Medical Association its arm should reach from Port Darwin to Hobart, from Sydney to Fremantle. If the stories which reach us about the bondage in which many of our Victorian brethren are

held be true, we, in happier lands, should be prepared to make considerable sacrifices to come to their aid.

There are other questions of great importance—such as hospital abuse, the necessity for a supreme court of appeal for medical ethics, and many others, but I cannot deal with them. Have we not some power of looking before and after? In solidarity lies our safety. If the wharf-labourers, the miners, the seamen on our boats can strive and suffer for what they hold a principle, surely we, with our advantages of education, of resources, of belonging to what is practically a close corporation, can so band ourselves together that we may face our future with confidence and unafraid.

With apologies for a verbosity, the sincerity of which should discount a charge of "high-falutin."—Yours, etc.,

RICHARD ARTHUR.

Sydney, 10th January, 1902.

ANISOMETROPIA.

(To the Editor of the Australasian Medical Gazette.)

SIR,—In your *résumé* of ophthalmology, Dr. Douane's treatment of correcting each eye in anisometropia is referred to with approval. For the last 12 years, I have always treated cases in this manner, and Mr. F. B. Archer, senior surgeon at the Central London Ophthalmic Hospital, who taught and practised this method, had done so for fifteen years, that is, from 1885, with unvarying success.

Yours,
W. KENT HUGHES.

21 Collins Street,
Melbourne.

THE DISPUTE AT THE WOMEN'S HOSPITAL, MELBOURNE.

(BY OUR SPECIAL REPORTER.)

THE cause of this unfortunate trouble appears to have been a want of confidence in the honorary staff by the committee of the hospital.

The facts are as follows:—A death from septicæmia occurred at the end of December, and a number of cases were running a high temperature.

A meeting of the honorary staff was held, and it was decided to make certain changes, viz., to isolate all septic cases, and to have the ward disinfected with formaline. (This latter had actually been done).

Dr. Cuscaden, on behalf of the staff, reported this to the committee, and informed them that all danger was passed, and that the staff saw no necessity to close the wards. He was asked the following question:—"Would the staff take all responsibility if the hospital remained open?" and he replied "Yea."

He was then asked if he would guarantee that no further outbreak of sepsis would occur, and he replied that he would give no such guarantee. It was then moved and seconded that a sub-committee be appointed to inquire into the matter.

Nothing further did Dr. Cuscaden, as representative of the staff, hear, until he received a telephone message that the committee had decided to close the hospital, and that they were carrying out his wishes.

Dr. Cuscaden asked the secretary to kindly take a message from him to the committee, and to say (fearing any mistake) that the honorary staff did not wish the hospital closed.

The secretary's reply to this was that the committee had decided to close the hospital.

On the 25th January, it was reported at a committee meeting that Messrs. J. B. Lewis and J. Sandison Yule (the medical staff for the midwifery department) refused to follow out the instructions of the committee, and they sent a letter to the committee, in which they stated that they had not defied the instructions of the committee out of mere bravado, but that their "consciences as medical men in a position of trust would not allow them to send away patients, who might be within a few minutes of confinement, to a private institution half-a-mile away, when they had behind them a hospital pronounced clean by the unanimous voice of the honorary medical staff."

The honorary medical staff of the infirmary and obstetric departments sent the following letter to the committee:—"At a meeting of the united staffs of the infirmary and obstetric departments, held at the hospital on the 20th inst., it was unanimously resolved that the action of the committee in closing the obstetric department, contrary to the expressed wish and advice of the honorary obstetric staff, was, under existing conditions, unnecessary and uncalled for, inflicting a severe and needless hardship on the suffering and indigent women of this city, and so calculated to place many of them in a dangerous and desperate position at a most critical time.

"We therefore urge that the obstetric department be re-opened for the reception of cases, without further delay."

The committee then catechised members of the honorary medical staff who were present, trying to justify their own position, and making use of medical terms. One member wished to know the meaning of *sapremia*, and was informed by a member of the staff that terms were used probably with which the committee was not familiar; the inference being that they were not a committee of medical practitioners, but ordinary individuals not supposed to understand such matters.

The committee gave the resident medical officers a month's notice, and dismissed the secretary and superintendent (Mr. Gibson) at once for disobeying their orders.

There can be no doubt that the officials of the Hospital made a mistake in disobeying the orders of the committee, and they ought certainly to have left the matter in the hands of the honorary staff. The committee, on the other hand, should not have taken upon itself medical duties, and should have been guided by its honorary staff, who have quite as much at stake in any matter pertaining to the well-being or otherwise of the Hospital.

The medical staff may well consider that they have been unjustifiably snubbed by the committee, and such treatment could not be passed over by them without vigorous protest. Their opinions have been flouted, and their medical knowledge ignored, and, according to the resident medical officers, the interference of two members of the committee in the medical department of the Hospital has been a source of great annoyance. They have been accused of patrolling the wards weekly, bursting into labour wards during confinements, entering the residents and students rooms without knocking, and turning away an urgent case to get a reference without the resident medical officer seeing the case at all.

It is to be hoped that some new system of management will be inaugurated, and that such a worthy and useful institution as the Women's Hospital should not suffer by mismanagement.

PUBLIC HEALTH.**New South Wales.**

Vital Statistics.—The Government Statistician reports on the vital statistics of the metropolis for the month of December, 1901, as follows:—

The births during the month of December numbered 1,005, being 70 greater than the average for December for the past five years. The deaths for the month were 574, or 52 greater than the quinquennial average for December. Balance of births over deaths, 431. The birth rate being 2·06 per 1,000 of population, and the death rate 1·18 per 1,000. True infantile mortality, under one year, compared with the births for the month, at the rate of 244 per 1,000 for the city, and 176 for the suburbs. For the metropolis, as a whole, the rate was 189 per 1,000. Zymotic diseases caused 104 deaths, or 18 per cent.; typhoid fever, 9; scarlet fever, 8; whooping cough, 37; and bubonic plague, 1. Constitutional diseases were responsible for 94 deaths, or 16·4 per cent; those from phthisis being 50; cancer, 30. The deaths from phthisis comprised 8·7 per cent. of all deaths. Local diseases numbered 284 deaths, or 49·5 per cent. of the death list; of these, 76 were from enteritis, and 21 from heart disease.

For the quarter ended 31st December, 1901, the births numbered 8,195, and the deaths, 1,605; which are respectively 245 and 101 more than the average numbers registered for this quarter during the previous five years, equivalent to an increase of 8½ per cent. on the average of births, and of 6½ on the average of deaths. In the zymotic group, the death rate increased by 29 per cent. above the average of the December quarter for the last five years, caused mainly by the deaths from whooping cough. There were satisfactory decreases in deaths from influenza, typhoid, and diarrhoea, but an increase in the number of deaths from measles, scarlet fever, diphtheria (with 18 deaths), and the septic diseases. In constitutional diseases, with the exception of phthisis, which shows an excess of 14 per cent. above the five years' average, there is little variation. Developmental diseases show a slight advance. The most material divergence from the normal in local diseases is found in the respiratory group, wherein there were 185 deaths, as against an average of 146 for the previous five years, being an increase of 27 per cent. The main complaint in this group was pneumonia, which brought about 124 deaths, as compared with the average of 73, thus increasing the rate from this disease by 71 per cent. Enteritis, the great cause of mortality among children during the hot months, caused 151 deaths; about the average number. The birth rate for the quarter under review, was 6·54, that for the previous five years being 6·31 per 1,000. The death rate for the quarter is 3·29 per 1,000, being almost identical with 3·22 per 1,000 the quinquennial rate.

THE BUBONIC PLAGUE.

We regret to report that since our last issue several cases of bubonic plague have occurred in Sydney. The following is an abstract of a report on the subject to the Government by Dr. F. Tidswell, the Acting-President of the Board of Health:

"After a period of quiescence lasting about 15 months, plague re-appeared in Sydney on November 14th, 1901. From this time to date there have occurred 17 cases.

"It is to be noted that no less than four produce stores have been implicated in the present series of cases, viz., Hay Street, city, George Street West, Rushcutters' Bay, Alexandria. Inquiries show that the produce sold at these stores was obtained in each instance from several places; the railway station, the Adelaide, Tasmanian, New Zealand, North Coast, and Howard Smith's wharves being usually mentioned. It is not likely that the railway station is infected, but some suspicion naturally attaches to the wharves. Nevertheless the absence of any cases attributable to infection acquired at or near the wharves and the negative result of their recent sanitary inspection, makes it impossible to determine on any one of them as a possible centre. The City Council has already taken action to require the owners to provide rat-proof cement basements to produce stores, and no further measure with respect to them appears to be indicated at the present time.

"Certain rats taken in the south and west of the city in November last were found to be infected with plague. Among the 814 rats examined in the Board's laboratory since that date, all were clearly free from the disease until the past week or 10 days (January 28th-February 8th), during which some suspicious specimens have been received from two places in the city at which rats were said to be dying. Several specimens from these places have been bacteriologically examined, and although the results are obscured by mixed infections there is a certain amount of evidence that the rats have plague.

"On the evidence furnished by the foregoing data there can be little doubt that the plague is still existent amongst the rats in this city. Nevertheless, it does not appear, on the one hand, to be generally prevalent amongst them, nor on the other hand, to be maintained at any specific centre which can be dealt with by cleansing operations. Consequently the only practicable measure of a general character is rat destruction on the lines already in operation. On this point it may be mentioned that since November, 1901, 24,269 rats have been burnt in the board's furnaces, and that additional large but uncounted numbers were killed during the fumigation of vessels and sewers. It is reasonable to conclude that these measures have hitherto averted the more serious possibilities of the epidemic which has threatened and still threatens the city. But in view of recent developments it may now be deemed desirable to make use of every possible means to induce increased destruction of the rats. For this purpose householders should be enjoined to lay poison freely, and to clear away accumulations which may afford food or harbourage for rats.

"In the meantime the occurrence of cases can only be met by the usual measures of isolation and disinfection. These are vigorously carried out by the department with respect to all actual cases of plague wherever occurring, and with respect of suspicious premises in the suburbs. With regard to suspicious premises in the city, an arrangement has been made with the Medical Officer of Health (Dr. W. G. Armstrong) that they shall be dealt with by the city local authorities to the full extent of their powers. Immediate reference to this department to be made when anything further is necessary."

At a meeting of the Sydney Municipal Council held on February 11th, it was resolved "that as produce stores were apparently plague centres where outbreaks occurred, the whole of the produce in infected stores should be

destroyed; and that it be an instruction to the health committee to see that such produce was destroyed; and that in the opinion of the Council, it was not desirable that the City Health Officer should absent himself from duty at this juncture." Dr W. G. Armstrong is thus prevented from attending the Inter-colonial Medical Congress at Hobart.

Victoria.

Typhoid Fever in Melbourne.—A return presented to the Board of Public Health showed that during the fortnight ended February 1st, 166 cases of typhoid, with three deaths, occurred in the State.

The Birth Rate.—At a meeting of the Board of Public Health on February 5th, it was stated that the excess of births over deaths in the Victorian metropolitan area was not more than 500 per month. The president remarked that the falling off of the birth-rate was engaging attention all over the world.

Vital Statistics of Melbourne and Suburbs.—During the month of December, 1901, the births numbered 945, and the deaths 784. Excess of births over deaths, 161. Specific febrile or zymotic diseases caused 92 deaths, or 11.73 per cent.; constitutional diseases, 158 deaths, or 20.15 per cent.; local diseases, 389 deaths, or 49.62 per cent. Of the specific febrile or zymotic group, whooping cough was responsible for 44 deaths, and diarrhoeal diseases for 28. Of the constitutional group, cancer caused the death of 55 persons; tubercular meningitis, 11 deaths; phthisis, 60; other forms of tuberculosis, 16. Of the local diseases, 71 deaths occurred from diseases of the nervous system, and diseases of the circulatory system accounted for 60 deaths. Diseases of the respiratory system caused 88 deaths, of which pneumonia caused 34. Diseases of the digestive system were responsible for 147 deaths. From enteritis 109 deaths occurred. Diseases of the urinary system accounted for 41 deaths, and Bright's disease for 28. The mortality from diphtheria for the years 1890 to 1901:—1890, 470; 1891, 172; 1892, 100; 1893, 35; 1894, 51; 1895, 57; 1896, 93; 1897, 151; 1898, 123; 1899, 56; 1900, 77; 1901, 45. From typhoid fever—1890, 403; 1891, 192; 1892, 154; 1893, 120; 1894, 155; 1895, 142; 1896, 149; 1897, 121; 1898, 222; 1899, 143; 1900, 94; 1901, 69. Thus the mortality from typhoid fever in 1901 was—both absolutely and relatively—the lowest recorded during the last 41 years. The deaths of infants under twelve months for December, 1901, numbered 266, as compared with 205 in the corresponding month of the year 1900. Hence the infant mortality was 261 per 1000 births in the month under review as compared with 204 in December, 1900. The proportion of deaths of elderly persons, aged 75 and upwards, has shown a marked increase during the last eleven years, steadily rising from 5.94 per cent. in 1891 to 11.42 per cent. in 1901.

South Australia.

Central Board of Health.—A meeting of the Central Board of Health was held at the offices, Victoria Square, on Wednesday, January 29th.

The infectious disease returns showed 2 cases of typhoid fever at Bundaleer, 2 at Gawler South, and 1 at each of the following places:—Koolunga, Lutton, Kadina, Kapunda, Port Elliot, Booleroo, Centre, and Baroota. One case of pulmonary tuberculosis at each

of the following places:—Adelaide, Knightsbridge, Kent Town, Baker's Flat, Forestville, New Parkside, North Unky, Parkside, and Franklin. One case of puerperal fever at Stirling West.

The infectious disease mortality returns showed 1 death from pulmonary tuberculosis at each of the following places:—Adelaide Hospital, Knightsbridge, and Richmond; 1 from typhoid fever at Murray Bridge, and 1 at Adelaide; 1 from puerperal fever at Norwood, and 1 at Currency Creek.

Vital Statistics.—The following returns of births and deaths are given for South Australia, exclusive of the Northern Territory, for the month of November during the years 1896-1901 inclusive. 1896, births 810, deaths 292; 1897, births 766, deaths 367; 1898, births 649, deaths 486; 1899, births 735, deaths 432; 1900, births 751, deaths 329, 1901, births 708, deaths 317. Of these deaths, 375 occurred from zymotic diseases, 347 from constitutional diseases, 201 from developmental diseases, and 201 from local diseases. The highest birth rate occurred in the year 1896 viz. 235 per cent., and the lowest in 1901 viz. 198. The highest death rate was in 1898 viz. 140 per cent. and the lowest in 1896 viz. 85 per cent. The causes of death registered for the month of November, 1901, are whooping cough 7, enteric fever 5, diarrhoea and dysentery 15, cancer 20, phthisis 17, apoplexy 5, epilepsy 1, convulsions 12, other diseases of the brain and nervous system 26, diseases of the circulatory system 30, bronchitis 13, pneumonia 19, enteritis 14, while old age was responsible for 16 deaths. For the city of Adelaide during the month of November the returns of births and deaths for the period 1896-1901 are: In 1896, births 78; 1897, births 89; 1898, births 78; 1899, births 92; 1900, births 87, 1901, births 70. The highest birth rate thus occurred in 1899, 92 or 236 per cent., and the lowest 1901, 70 or 179 per cent. In 1896 the deaths were 70; in 1897, 76; in 1898, 119; in 1899, 70; in 1900, 63; and in 1901, 78. The highest death rate occurred in 1898, 119 or 307 per cent., and the lowest in 1899, 70 or 180 per cent. Of the deaths during these five years 62 occurred from zymotic diseases, 88 from constitutional diseases, 37 from developmental diseases, and 220 from local diseases.

New Zealand.

Vital Statistics.—In Auckland and Suburbs during the month of December, 1901, 110 births and 44 deaths were registered. In Wellington and Suburbs 92 births and 30 deaths. In Christchurch and Suburbs 92 births and 42 deaths. In Dunedin and Suburbs 94 births and 40 deaths. The death rates per 1000 of population in Auckland and Suburbs was 0.88; in Wellington and Suburbs, 0.69; in Christchurch and Suburbs, 0.94; in Dunedin and Suburbs, 0.76. In these four districts eight deaths occurred from zymotic diseases, 41 from constitutional diseases and 80 from local diseases. Under the constitutional group, cancer was responsible for the death of 16, and tubercular diseases for 21 persons. Under the local diseases group nine deaths occurred from apoplexy, six from pneumonia, and five from bronchitis.

Tasmania.

Vital Statistics.—During the month of December, 1901, 136 births (73 males, and 64 females) were registered in the districts of Hobart and Launceston; proportion per 1,000 of population, 2.43. The

deaths numbered 97 (50 males and 47 females). Of the deaths—14 occurred from constitutional diseases, or 6·67 per cent.; 24 from developmental diseases, or 38·33 per cent.; and 48 from local diseases, or 46·67 per cent. of the constitutional diseases 7 deaths were caused by cancer; of the developmental diseases, 18 deaths were from old age; of the local diseases, 14 were caused by enteritis.

Queensland.

Vital Statistics.—The Registrar General reports that during the month of November, 1901, 172 births were registered in the district of Brisbane, being 23 more than in the previous month; 106 deaths were also recorded for the same period and district, being 24 more than in October, and 15 less than in the corresponding month of last year. In the suburbs outside Brisbane the deaths numbered 49, the total number of deaths in the combined districts was 155. True infantile mortality under one year as compared with births in the district being 17·71 per cent. within and 17·86 per cent. outside the municipality of Brisbane. Total for the city and suburbs being 21·75. Of these 16 were from zymotic, 25 from constitutional, and 95 from local diseases. Of the constitutional diseases ten were from cancer and eleven from tuberculosis. Of local diseases nine were from heart disease and 14 from pneumonia.

West Australia.

Vital Statistics.—The Registrar-General reports for the quarter ended June, 1901, the total number of births to be 1,455, and the deaths for the same period as 713. Deaths of children under one year as 226. Deaths from zymotic diseases 122. Constitutional diseases 82. Local diseases 302. Of the zymotic disease 45 were from typhoid. Of the constitutional diseases 25 were from cancer, and 37 from phthisis. Of the local diseases 20 were from heart disease, 39 from pneumonia, 75 from enteritis. For the quarter ended 30th September, 1901, the total number of births was 1,538, and the deaths 594. Deaths of children under one year 126. Deaths from zymotic diseases 76, constitutional diseases 74, local diseases 293. Of the zymotic diseases 19 deaths were from measles, and 12 from influenza. Of the constitutional diseases cancer was responsible for 14 deaths, phthisis 39, other forms of tuberculosis 6. Of the local diseases 12 deaths occurred from inflammation of the brain, 10 from convulsions; from endocarditis 17, from heart disease 27, bronchitis 24, and from pneumonia 63.

HUDSON'S "EUMENTHOL" JUJUBES (Registered) are a Gum Jujube containing the active constituents of well-known Antiseptics, Eucalyptol, Thymus Vulg., Pinus Sylvestris, Mentha Arv., with Benzo-Borate of Sodium, etc., and exhibit the antiseptic properties in a fragrant and efficient form. Sold by all chemists, tins 1s. 6d. Are Antiseptic, Prophylactic, reduce Sensibility of Mucous Membrane.

Mr. W. A. Dixon, F.I.C., F.C.S., Public Analyst of Sydney, after making exhaustive tests, says: "There is no doubt but that 'Eumenthol' Jujubes have a wonderful effect in the destruction of bacteria and preventing their growth. . . . I have made a comparative test of 'Eumenthol' Essence and Creosote, and find that there is little difference in their bactericidal action."

MILITARY INTELLIGENCE.

NEW SOUTH WALES.

A MEDICAL CORPS ORGANISED.—A thoroughly equipped Army Medical Corps will accompany the Commonwealth Contingent to South Africa. Major-General French, Brigadier-General Finn, and Colonel Williams have received instructions to form the corps, which will include five army medical officers and 110 of all ranks. The medical unit will include 50 bearers and 60 members of field hospital corps. It will be equipped with four ambulance waggons from New South Wales, and also with transport carts and water carts for the field hospital. Medical and surgical equipments will be drawn in South Africa.

The Commander-in-Chief of the British Army has appointed Dr. Frank Tidswell, as Surgeon Captain, and Drs. Sinclair Gillies and Charles MacLaurin, as Lieutenants, in the Royal Army Medical Corps.

Erratum.—We regret that it was inadvertently stated in our last issue that Lieutenant G. S. Samuelson, M.D., Army Medical Corps, of Armidale, had resigned his commission.

The Army Medical unit is now practically complete. There are six Tasmanians and six West Australians to be added to the strength, but these will not come to Sydney. The Queensland quota reached camp yesterday morning. Captain Green is in charge, he will soon be joined in camp by Captain Howse, V.C., who will go as second in command of the unit, which will probably be shipped for the Cape first, on the 11th or 12th of February.

VICTORIA.

Dr. Code, junior resident surgeon at the Ballarat Hospital has resigned his appointment as he is leaving for South Africa with the Commonwealth Field Hospital.

Dr. W. James has left Williamstown, Vic., for service on the field hospitals with the outgoing contingents.

NEW ZEALAND.

Dr. Horace Eccles, of Mangonui, has been appointed to the medical staff of the Eighth Contingent.

New Zealand Volunteer Medical Staff.—David Mathewson Nairn to be Surgeon-Captain. Commission to date from the 15th November, 1901.

HOSPITAL INTELLIGENCE.

The resident medical officer of the Alfred Hospital, Melbourne, Dr. Major, reported to the committee of management on January 31st, that owing to the rapid influx of typhoid fever patients during the past week there were no vacant medical beds for females available. Dr. Major asked for permission to improvise a couple of beds in the cottage to meet cases of emergency. The matter was left in the hands of the secretary and superintendent.

The Sydney Hospital.—At the last meeting of the Board of Directors, Dr. R. Steer Bowker forwarded a cheque for £100 from a donor who requested that his name should not transpire. It was decided that the money should be utilised for the purchase of surgical instruments for the hospital, under the direction of Drs. Fiaschi and Bowker. Plans of proposed alterations to Moorcliff were received from the Department of Public Works, and referred to the house committee. The house committee was authorised to have plans and specifications prepared, and tenders

called for various works in contemplation, and for which the Government have voted a sum of £2,500.

The question of a further monetary advance to the Queen Victoria Fever Hospital, Melbourne, has been considered by the Cabinet. A further grant of £4,000 will be, in addition to a sum of £2,000 which Sir George Turner, when State Treasurer, set apart for the institution.

Western Suburbs Cottage Hospital, Sydney—

The annual report showed that during the year the hospital had been enlarged, at a cost, including furniture, of £673. The report of the honorary medical officers showed that 166 patients had been admitted for treatment during the year, but that the hospital had proved inadequate for the number of applications for admission. The balance-sheet showed that the expenditure during the year had been £2,190 9s 10d., and the income and assets in fixed deposits, &c., £3,483 0s. 3d.

The Lady Bowen Hospital, Brisbane, is under new management, and is now offering accommodation to country patients. There is a resident surgeon, and a private ward can be arranged for if so desired.

Launceston Hospital.—The Visiting Committee of the Launceston Hospital Board have had under consideration the charges made against the management of the hospital by several ex-nurses of the institution. They recommended to the board that the hon. medical officers, through whom the complaints were made, be requested to associate with the committee in making the contemplated investigation into the charges.

Hobart Hospital.—During the year 1,446 cases have been treated in the Hospital, as against 1,451 in 1900, and of this number 661 came from country districts. The daily average number of occupied beds during the year was 80, and the average stay of patients in the hospital, twenty and one-fifth days, as compared with twenty and a half days last year.

Prince Alfred Hospital.—At the January meeting of the board of directors of the Prince Alfred Hospital, a deputation from the Master Builders' Association waited upon the board to urge that the erection of the new pavilions should be carried out by contract, and not, as requested by the Sydney Labour Council at a previous meeting, by day labour. It was decided to recommend the Minister for Works to erect one pavilion by contract, and the other by day labour. As the two pavilions will be identical in design it was agreed that their erection side by side would afford a good object lesson as to the merits of the two systems, and that as they would be under the same conditions and supervision, and as the exponents of both systems would be stimulated to do their best both as to cost and workmanship, the result could only be advantageous to the hospital.

MEDICO-LEGAL.

Use of the word "Surgeon"—N.S.W. Supreme Court Appeal.—Mr. Justice Owen had lately before him in Chambers a special case respecting the conditions under which a dentist might apply the word "surgeon" in connection with his profession. It appeared that Robert Ormiston, a dentist, was proceeded against on an information that on November

23, at Mungindi, he, not being a legally qualified medical practitioner within the meaning of the Medical Practitioners Act of 1898, did use the title of surgeon, and the main point of the evidence was that the defendant had exhibited a placard which read as follows: "Dr. R. Ormiston, D.D.S., surgeon and mechanical dentist." It was also asserted that Ormiston said he was a doctor of dental surgery. His Honour said it appeared to him that the defendant used the word "surgeon" in the sense of an adjective, and not of a substantive. The appeal was accordingly dismissed with costs.

An alleged illegal operation.—At a coroner's inquest held in Melbourne last month, Ellen Dickenson was committed for trial at the Criminal Court sittings on a charge of wilful murder by the performance of an illegal operation on a school-teacher from Toora, Gippsland.

A TRUE HERO OF MEDICINE.

A SUBSCRIPTION list having been opened in the columns of the *Australasian Medical Gazette* in aid of the widow and children of the late Dr. Smyth (see the *British Medical Journal* of December 7th, 1901, p. 1709), we beg to acknowledge the receipt of the following contributions:—

	£.	s.	d.
" Ipswich," Queensland...	2 0 0
Dr. R. W. Young, Milton	1 1 0
" A. B. Morris, St. Helen's Earls-
court, Tasmania...	1 1 0
" W. H. Tomlins, Ballina, N.S.W.	1 1 0
" W. H. Crago, Sydney	1 1 0
" G. E. Rennie, Sydney	1 1 0

MEDICAL NOTES.

Medical women in Paris.—A large number of lady doctors are now practising in Paris, the majority of them being Russian Jewesses, just as are the greater number of the women medical students. At a rough calculation there are 300 ladies pursuing medical studies at the various schools, and working side by side with the men students. The reason of the invasion of the Jews is, of course, the disabilities that exist in Russia for those of the faith of Israel—disabilities that are hardly lessened in Germany.

Trichinosis in Adelaide.—A case of this disease, which is said to be new to Australia, has been discovered within the past few days by Professor Watson, of the Adelaide University, Dr. Angus Johnson, and Veterinary Surgeon Desmond. The disease was noticed during an operation for cancer in the neck, recently performed. The growth was examined, and minute white bodies were seen to be scattered through the tissue. These were recognised by microscopical examination to be the typical trichina spiralis. The patient had never been out of the States, but he admitted having been passionately fond of polony.

A work will shortly be published by Cassell and Co., Ltd., for the use of junior practitioners and medical students upon "Mental Affections, an aid to the ready diagnosis and treatment of insanity, in its early and curable stages," by W. Herbert Barker, M.R.C.S. Eng., Medical Superintendent of the Hospital for the Insane, Ararat.

Braithwaite's Retrospect of Medicine is now discontinued.

The Government has decided to appoint a small Royal Commission to inquire into the question of financial and general reforms in connection with the Melbourne University.

PERSONAL ITEMS.

Dr. W. SNOWBALL has been compelled by ill-health to retire from practice, and intends residing for the present in Gippsland, Victoria.

On behalf of the Oddfellows of East Maitland, Dr. S. ALCORN has been presented with a suitably inscribed instrument case.

Dr. D. P. O'BRIEN, F.R.C.S. Irel., has resigned his appointment as Medical Officer at Ravenswood, Queensland.

At the monthly meeting of the Dental Board, it was unanimously decided to grant SIR JAMES GRAHAM seven months leave of absence.

Dr. W. J. OLIVEY, formerly of Western Australia, has settled at Temora, N.S.W.

Dr. JOHN THOMPSON has removed from Broken Hill to Williamstown, Victoria.

Dr. WM. SPROULE has removed from 221 Devonshire Street, Sydney, to Wyalong, N.S.W.

Dr. M. MATHESON has removed from Waverley to Croydon, North Queensland.

Dr. E. A. BARDSLEY has settled in Waverley, having succeeded to Dr. M. Matheson's practice in that suburb.

Dr. GEORGE McLEAN has removed from Paddington to Old South Head Road, Waverley, near Sydney.

Dr. HEGGATON, late Resident Medical Officer, Prince Alfred Hospital, Sydney, has succeeded to Dr. Parry's practice at Murrumburrah, N.S.W.

Surgeon-Captain BUNTINE, V.C., of Victoria, who was present at the relief of Ladysmith, is at present staying with his brother, the Rev. H. S. Buntine, of Mount Druitt, N.S.W.

Dr. ALEX. PATERSON, who has been practising at Dunedin and Roslyn, has removed to Christchurch.

Dr. R. N. ADAMS, who lately resigned his appointment at the Auckland Hospital, has returned to Dunedin.

Dr. C. E. CORLETTE has removed from 36 College Street to 183 Liverpool Street, Hyde Park.

Dr. F. E. WEBB has removed from Perth, W.A., to Mathinna, Tas.

Dr. D. MORRISON has removed from Franklin to Evandale, Tas.

Dr. P. W. MENZIES has removed from Napier to the Bay of Islands.

Dr. J. R. HUTTON, late of Victoria, is acting as *Locum Tenens* to Dr. Moir of Auckland, during the latter's absence.

Dr. T. HOPE LEWIS, of Auckland, leaves in February on a year's visit to England.

Dr. G. S. SAMUELSON has returned from South Africa, and resumed practice at Armidale, N.S.W.

At a recent gathering at the Town Hall, Sydney, a presentation by the Mayor (Alderman Thomas Hughes), was made on behalf of the citizens, to Sir James Graham, of a souvenir, prior to the departure of that gentleman for England. The gift to Sir James Graham consisted of a silver tea and coffee service, and in addition there was a silver afternoon tea service, which the citizens presented to Lady Graham.

MEDICAL APPOINTMENTS.

The following Medical Appointments are announced :

NEW SOUTH WALES.

Corlette, Dr. C. E., has been appointed Acting Hon. Assistant Surgeon to the Women's Hospital, Sydney, during the absence of Sir James Graham, M.D., in Europe.

Cox, Harrie, M.B. Syd., to be Government Medical Officer and Vaccinator at Warren, *vice* Dr. J. H. Wilson, resigned.

Reisch, James, M.B., C.M. Edin., to be Government Officer and Vaccinator at Molong, *vice* Dr. B. Lamb, resigned.

Roid, W. H., M.B., Ch.M., Syd., to be Junior Medical Officer Department of Lunacy.

Seabrook, Dr. L. L. jun., to be Resident Medical Officer of Broken Hill Hospital.

Sydney Hospital.

Senior Resident Medical Officers, Drs. Corbin and Cameron ; Resident Pathologist, Dr. Griffiths.

VICTORIA.

Lister, Harold, M.B., to be Acting Medical Superintendent of the Ararat Lunatic Asylum during the absence on leave of W. H. Barker, M.R.C.S., Eng.

Mitchell, James Thomas, M.D., Ch M. Aterd., M.R.O.S. Eng., to be Resident Medical Officer to the Ballarat Benevolent Asylum and Lying-in Home, *vice* Dr. Thos. Le G. Holthouse, deceased.

WEST AUSTRALIA.

Davy, T.G., M.R.C.S. Eng., L.S.A. Lond., to be Honorary Medical Officer to the Fremantle Hospital *vice* Dr. Hope, resigned.

Kron, Dr. E. G. Leger, to be Officer of Health, Peak Hill, W.A., *vice* Dr. O'Flaherty, resigned.

SOUTH AUSTRALIA.

Prior, Percival Underdown, M.R.O.S., to be Medical Officer to the Destitute and Aborigines in the district of Penola.

Seabrook, Edwin Fraser, M.D., to be a Health Officer under the provisions of "The Quarantine Acts."

Vercro, W. A., M.B., Ch.B. Adel., to be Assistant Gynaecologist, Adelaide Hospital.

White, Margaret, M.B., Ch.M. Syd., to be House Surgeon, Children's Hospital, Adelaide.

Wilson, T. G., M.B., Ch.M. Syd., F.R.C.S. Edin., to be Assistant Gynaecologist, Adelaide Hospital.

QUEENSLAND.

Dods, Joseph E., M.B., B.S., to be acting Medical Officer, Brisbane, in connection with the Diamantina State Children during the absence on leave of K. L. O'Doherty, F.R.C.S.I.

Larwill, John, L.R.C.P. & S. Edin., to be Medical Officer at Boonal *vice* Jas. H. Finemore, L.R.C.P., left the district.

Love, Wilton Wood Russell, M.B., to be Deputy Commissioner of Public Health during the absence of the Commissioner of Public Health.

TASMANIA.

Butler, Hon. G. H., M.R.C.S. Eng., L.R.C.P. Lond., to be Hon. Medical Officer to Hobart Hospital.
 Launceston General Hospital. The following medical officers have been appointed *ex officio* members of the Board of Management of the Launceston General Hospital:—Drs. J. M. Pardey, C. Parker, and G. E. Clemons.

NEW ZEALAND.

Collins, J. C., late of the Peak Hill District Hospital, New South Wales, to be Senior Medical Officer at the Auckland Hospital.
 Sale, Dr. J. B., to be Senior House Surgeon at the Dunedin Hospital, in the absence of Dr. Hall.
 The Dunedin Hospital Trustees appointed as—Honorary Surgeons, Drs. J. O. Goss, Gordon Macdonald, and L. E. Barnett.
 Physicians—Drs. Colquhoun, Roberts, and Macpherson.
 Physician for the Diseases of Women—Dr. F. C. Batchelor.
 Ophthalmic Surgeon—Dr. Lindo Ferguson. Physician for Skin Diseases Dr. William Evans. Pathologist—Dr. W. S. Roberts.
 Assistant Surgeon—Dr. F. Stanley Batchelor. Assistant Physician—Dr. M. Macdonald.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

NEW SOUTH WALES.

For registration.

Ambrose, Theodore, M.B. Univ. Syd. 1902.
 Anderson, Hugh Miller, M.B. Univ. Syd. 1902.
 Birmingham, Herbert Joseph, Lic. A. Coll. Surg. Irel. 1880; Lic., Lic. Midwif. 1881, K. Q. Coll. Phys. Irel.
 Broadbent, Percy Lewis, M.B. Univ. Syd. 1902.
 Farrington, John, Lic. R. Coll. Phys. Lond. 1889, Mem. R. Coll. Surg. Eng. 1889.
 Gowland, John George Blantyre, Lic. R. Coll. Phys. Edin. 1899, Lic. R. Coll. Surg. Edin. 1899, Lic. Fac. Phys. Surg. Glasg. 1899.
 Horne, Herbert Roger, Lic. R. Coll. Phys. Edin. 1891, Lic. R. Coll. Surg. Edin. 1891, Lic. Fac. Phys. Surg. Glasg. 1891.
 Moorcraft, Edward Woods, M.B. Univ. Syd. 1902.
 Muscio, Allen, M.B. Univ. Syd. 1902.
 Page, Earle Christian Grafton, M.B. Univ. Syd. 1902.
 Scholberg, Peter Herbert, Lic. R. Coll. Phys. Lond. 1889, Mem. R. Coll. Surg. Eng. 1899.
 Sharp, Walter Alexander Ramsay, M.B. Univ. Syd. 1902.
 Stephen, Edgar Horatio Milner, M.B. Univ. Syd. 1902.
 Stuckey, Francis Seavington, M.B. Univ. Syd. 1902.
 Wallace, Donald, M.B. Univ. Syd. 1902.
 White, Margaret Isabel, M.B., Mast. Surg. Univ. Syd. 1902.

For additional registration.

Roseby, Edmund Rupert, M.Ch. Univ. Syd. 1902.

VICTORIA.

Oalhoum, James, M.B. M.-lb. 1901.
 Laurie, William Spalding, M.B. Melb., 1901.
 Mackeddie, John Fullarton, M.B. Melb. 1901.
 Stillwell, Effie, M.B. et Ch. B. Melb. 1901.
 Treagear, William George Herbert, M.B. Melb. 1901.

Additional Qualification Registered:

Alexander, Lillian Helen, Ch. B. Melb., 1901.
 Costelloe, John, Ch. B. Melb. 1901.

TASMANIA.

Pinchin, Joseph Leonard, L.R.C.P. Edin. 1895, L.R.C.S. Edin. 1898, L.F.P.S. Glasgow, 1898.
 Webb, Francis Edward, M.B. Melb. 1888.

SOUTH AUSTRALIA.

Chapman, Henry George, M.B. Melb. 1899.
 Shaw, Helen, M.B. B., Melb. 1901.
 Snow, Frances, M.B., H.S., Melb. 1901.
 Weld, Elizabeth Eleanor, M.B., B.S. Melb., and M.B. Adel. 1900.
 Wilson, Thomas George, M.B., Ch.M. Syd. 1898; F.R.C.S. Edin.

QUEENSLAND.

Frost, Albert Ernest, Townsville M.B. 1897, B.S. 1898 Univ. Melb.
 Hatton, Piers James, Howard, Lic. R. Coll. Phys. and Surg. Edin. 1891, Lic. Fac. Phys. Surg. Glasg. 1891, M.B., Mast. Surg. 1891, Univ. Edin.

Additional Qualification Registered:

Byrne, William Samuel O'ayus, M.R.C.P. Lond. 1901.
Republished.

Matheson, Murdoch, Croydon, M.D., Queens. Coll. Univ. Kingston, Canada, 1870. (Originally registered in Queensland 6th Oct., 1881.)

WESTERN AUSTRALIA.

Additional Qualification Registered:

Gurdon, Edwin John, M.R.C.S. Eng. 1876; L.R.C.P. and L.M. Edin. 1878.
 Haynes, Edward James Ambrose, F.R.C.S. Irel. 1901.

Dr. ULLRICH, of Williamstown, is to act as junior resident surgeon at the Ballarat Hospital pending the appointment of a successor to Dr. Cade, who is going with the Australian contingent to South Africa.

BIRTHS, MARRIAGES AND DEATHS.

BIRTHS.

HARBISON.—On the 25th December, at Numurkah, the wife of J. A. Harbison, surgeon of a son.
 KELLY.—On the 9th December, 1901, at Elysium, Wingham, the wife of Dr. W. A. Kelly, of a daughter.
 KELLY.—On the 6th January, at Percy Street, Echuca, the wife of Dr. M. F. Kelly, of a daughter.
 LANGLANDS.—On the 18th December, 19 1, at Taleri, Malvern, the wife of Francis H. Langlands, F.R.C.S. Eng., of a son.
 MATHWIN.—On the 9th February, at Nathalia, Vic., the wife of Dr. F. S. Mathwin, of a son.
 SHIELDS.—On the 28th December, at Tantarron, Seymour, the wife of Douglas A. Shields, M.D., of a son.

MARRIAGE.

REIACH—DICK.—On the 4th February, 1902, at "Sunny Brae," Windsor, by the Rev. Thomas Thorburn, James Reisch, M.B., C.M., of Molong, to Margaret Lindsay Dick, of Randwick, N.S.W.
 VANCE—BARETT.—On the 28th December, at Holy Trinity Church, Balacava, by the Rev. C. E. Perry, M.A. Oxon., Dr. W. B. Vance, only son of W. J. Vance, "Westralia," Queen's Road, to Emma W., third daughter of J. W. Barrett, Byron Street, St. Kilda.

DEATHS.

GOODE.—On the 13th February, 1902, George Goode, M.A., M.D. Univ. Dub., of Camden, N.S.W., second son of William John Goode, C.E., of Finglas House, Co. Dublin.
 HARBISON.—On the 14th January, at Numurkah, of phthisis, Annie M., beloved wife of Dr. James A. Harbison, aged 34 years.
 WILLIAMS.—On the 18th January, at Queenscliff, David John Williams, M.D., F.R.C.S., aged 84.

NOTICES.

THE "GAZETTE" IS EDITED FOR THE PROPRIETORS BY
 GEORGE E. RENNIE, M.D., SYDNEY, N.S.W.;
 AND FOR THE OTHER BRANCHES OF THE
 BRITISH MEDICAL ASSOCIATION BY
 A. B. BROCKWAY, BRISBANE, Q.; H. W. BRYANT,
 WILLIAMSTOWN, VIC.; J. B. GUNSON,
 ADELAIDE, S.A.; HERBERT BORROCKS, PERTH, W.A.
 ORIGINAL ARTICLES WILL BE INSERTED SOLELY ON
 CONDITION THAT THEY ARE NOT CONTRIBUTED TO
 ANY OTHER PERIODICAL.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other States. Business communications should be addressed "The Manager."

Contributors will have to pay the cost of illustrations accompanying their articles.

MALE ATTENDANT for mental, inebriate, or general cases, seeks engagement. References and testimonials show 13 years' experience, including five years as attendant at Callan Park Hospital for Insane, three years as wardman in charge of Singleton Hospital. Address J. HILES, 161 Cecily Street, Leichhardt.

SPEECH DEFECTS CORRECTED, LIP READING FOR THE DEAF, GERMAN (ORAL) SYSTEM FOR DEAF MUTES, Children and Adults. Appointments by letter. For terms, &c., MISS ADDERLEY, Room 50, Vickery's Chambers, 76 Pitt Street, Sydney.

AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

ADDRESS IN MEDICINE.

By James Jamieson, M.D., Ch.M. Glas., M.D.
Melb., City Health Officer, Melbourne,
Victoria.

At the Intercolonial Medical Congress, Hobart,
February, 1902.

THE SIGNIFICANCE OF THE TERM "CURE" in MEDICINE.

POPULAR beliefs and superstitions are often survivals, representing, with little substantial change, the opinions of the wise and learned of some earlier time. This is certainly true in respect of medicine, and it may well inculcate modesty and caution in those who think that they have attained to the ultimatum of truth. The history of medicine is not by any means one of steady progress, in which, with constant growth of knowledge, there was equal improvement in its practical application. One of the chief causes, which led to the growth of a feeling of doubt as to the power of medicine to produce cures, was undoubtedly the rise of homeopathy. It was not that Hahnemann himself was sceptical of the powers of medicine—and his more orthodox followers even now err rather in the direction of credulousness—but those who could not accept the fundamental doctrine of homeopathy, *similia similibus*, or its peculiar mode of practice, the use of infinitesimals, had often to admit that results as good as their own were obtained by its practitioners. But, if doing what was tantamount to nothing had as good results as doing much, it was manifest that the progress of the disease could not have been materially influenced for good by either method. And, if Hahnemann did not succeed in converting the medical profession to his peculiar doctrines and practices, his work was not, on that account, of no effect. His speculations and experiences did, indeed, influence the progress of medical science, though it was in a way that he dreamt not of. If the first effect was to encourage a spirit of scepticism, which became almost absolute, especially in some of the schools of Germany, that scepticism did not remain barren. A large need of inquiry was thus opened up. If it be true that a scientific knowledge of the nature and causes of morbid processes is the essential basis of sound practice, it is manifest also that, to most men, the chief

pleasure and satisfaction in their study must lie in the hope that, with increase of knowledge, will come increase of power in the direction of therapeutics. The results have already been considerable, and we may confidently hope that the means at our disposal, for dealing effectually with many forms of disease, will yet be largely increased. Indeed, the most recent tendency in therapeutics is rather towards over activity, especially in the way of treating symptoms; the administration of powerful drugs being made almost too easy by the improvements in pharmacy. But though the spirit of scepticism is no longer dominant, the established principles of therapeutics are not so numerous or so fixed as to put aside altogether the inquiry whether there is any such thing as a cure of disease, in the sense of a restoration to health, actually brought about by artificial means. Whatever may be the causes by which disease is set up, diseases themselves are states of the organisms, disturbances of normal physiological processes. And just as the organism is subject to constant changes, so diseases must be, to a greater or less extent, subject to variations.

The Natural Processes of Cure.—The symptoms, by which a disease is recognised represent a chain of organic processes, dependent on the cause in which they took origin. Often after the cause has ceased to operate, there are results which in their turn become causes of a secondary order. The agents or forces which act as causes of disease were dealt with, in the stricter sense. The system, left to its own powers, is in most cases virtually helpless against parasites, whether animal or vegetable, when they have once gained a footing. It is only by the intervention of medicine that intestinal worms can be expelled, or parasitic diseases of the skin cured, in the great majority of instances. But the agents which produce so many acute and chronic infective diseases stand on a different footing. They are chiefly of the lower order of vegetable organisms, and so minute that their presence is first revealed, not by their individual appearance to the eye, but by the effects they produce. These are not merely of a local kind, for bacteria have such power of rapid multiplication, and of diffusing themselves or their products in the fluids and tissues of the body, that several effects of a general kind result. Unless modern medicine is completely on a wrong track, minute organisms are the cause of by far the most of the dangerous diseases to which human

beings are subject. The list of these infective diseases is steadily increasing, and even where full proof has not been supplied, we are often led, by almost inevitable inference, to assume that bacteria are the actual and efficient cause. In whatever other ways bacteria may manifest their pathogenic influence, it is now generally believed that the chief and most characteristic symptoms are due mainly to specific poisons, which they produce. With regard to most of these diseases, and especially in the case of the acute infective forms, it is evident that the body, though for a time seemingly overwhelmed by the invasion, has extraordinary powers of recuperation. Unless death takes place quickly, the multiplication of the invaders is checked. They are killed or expelled, or in some other way rendered innocuous, and complete recovery, as a rule, takes place. Sometimes, of course, effects remain, in the form of local structural alterations, which may last long, and ultimately prove more serious than the original affection. Such are, for example, the kidney and the ear complications and sequelæ of scarlet fever; but the rule stands good—death or complete recovery. Few questions in medicine have excited more attention, or are of more genuine scientific interest, than the inquiry into the method by which acute infective processes are brought to an end by the native powers of the organism. The process of recovery is in part easily understood. The poisons formed, whether directly produced by the bacteria themselves or as by-products in the breaking-down of the tissues, are steadily being destroyed, or are carried off by the kidneys and other organs of secretion. But it is now known that the destructive or expulsive action of the organs and tissues is largely helped by antitoxins, apparently the products of reactive cell activity. These neutralise the toxins, perhaps by entering into chemical composition with them. As regards the poisonous products of bacterial action, we can say that their injurious effects are first kept in check, and ultimately brought to an end by a combination of destruction, elimination, and antidotal neutralisation. As to the bacteria themselves, the question is, if possible, even more complicated. Some are killed by some constituent of the blood and fluids of the body, possibly a normal albumen, the so-called alexin; others are taken up and destroyed by the cells; many escape by the various excretory surfaces; while others again may long remain in various parts of the body, incapable perhaps of doing further injury to their host, or only producing local effects of a more or less harmful kind.

So much is known about the natural process of cure, or recovery, in the most successfully investigated class of diseases. And it is evident that the process is extremely complicated, and one which we can hardly hope to imitate fully in any kind of artificial or medicinal way. It is possible, of course, that the natural method is not always so complicated as that described, even in some of the infective diseases; but it may be well for the present to confine ourselves to that which we best know.

The Principles of Vaccination and Injections.

—We possess vaccines, in use against various forms of disease, typhoid, cholera, and plague, the best established, perhaps, being the Pasteurian inoculation against hydrophobia. But the use of any living virus, however carefully treated, is liable to be attended with risks. The method of obtaining protection by the injection of blood serum, from a person or an animal which has acquired immunity, and has completely recovered, is a more rapid and essentially safer method than either of the others, and its advantages have been notably shown in the case of diphtheria, which has supplied a triumphant demonstration of the fruitfulness, in most practical fashion, of pathological experiment and research. Even as an isolated fact it has enormous value, but it is far more, since it opens up quite a new path of inquiry. It allows us to cherish the hope that, before very long, any or all of the acute infective diseases may be rendered amenable to treatment in a similar way. But it also supplies demonstration of the principle that, in all our therapeutic efforts, we should imitate as closely as possible Nature's own curative methods. Probably in every case of acute infective disease a spontaneous effort at cure is made. But it may be insufficient, because the amount of toxin produced is so great that the protective mechanism breaks down, and the anti-toxin is produced too late or in insufficient amount. By the use of the anti-toxin serum an extra supply of the needful antidote is provided, and thus recovery is made possible, or greatly hastened. The use of anti-toxin in diphtheria is not merely the empirical application of a new and powerful remedy, but stands for the introduction of a new principle, and entirely new method into therapeutics, for the full fruit of which we may have to wait, the fruit itself being certain. There does not seem to be the same opening for the use of either vaccines or curative serums in the chronic infective diseases. They have not the self limiting power seen in the acuter forms, and therefore no definite natural

method of cure to be imitated. However powerful Koch's tuberculin may be, in either of its forms, and whatever its value for diagnostic purposes, it is generally believed to have failed as a curative agent. The same doubt holds with reference to the remedies of the serum order, introduced by Maragliano and others. It is plain that the disinfection of the blood and fluids of the body, as a whole, may almost be dispaired of; but if the protosa of malarial fever can be destroyed or their growth at least inhibited, by means of quinine, there may surely be other medicinal agents discovered, capable of acting in a similar way in other forms of disease.

Of late years the question has been seriously raised, whether the febrile process, as marked by an elevation of temperature, may not be part of nature's curative effort. Certain pathogenic organisms have been shown to have a very limited power of growth at temperatures not many degrees over the normal point. The critical fall of temperature in such diseases as pneumonia, and relapsing fever, suggests or admits of the explanation that the crisis is due, at least in part, to inhibition of bacterial growth, when a range of temperature, injurious to the particular organism, has been reached or long enough sustained; and there is the occasional observation that chronic infective diseases, such as phthisis, take a favourable turn, apparently as the result of an intercurrent attack of some other disease of an acute febrile kind. Nothing is more dangerous, or essentially more unscientific, than the habit of using powerful remedies for the relief of symptoms. Causal conditions must be discovered and the causes themselves attacked, or there can be no cure. The method of treating disease by means of animal extracts though in a way of old date, has received great development of late years. We are still greatly in the dark about the true physiology of internal gland secretion. It is the popular belief that every disease must or should have its specific remedy, if that could only be found out. Serum and organic extract methods will doubtless find much wider application in times not distant. All that has been gained, and probably all or most that is yet to be gained, is and will be the result of patient inquiry into the nature and causes of disease processes, and the practical adaptation of physiological principles, with such assistance as can be got from drugs, whose properties have been tested in the laboratory or at the bedside. The best illustration of this truth, as it is at present one of the most interesting, is to be seen in the modern treatment of consumption. From the

scientific use of rest or properly regulated exercise, open air life in a pure atmosphere, and a full supply of nourishing food, results which would once have been declared impossible are now obtained. Very often they are attained without the help of drugs; but, under certain indications, unmistakable help can be got from creosote, guaiacol, and other remedies. And in many other diseased conditions, both acute and chronic, very much can be done to bring about recovery, to bring about, in fact, what is tantamount to a cure, temporary or more permanent. The functions of the stomach and intestine can be regulated, the excretory capacities of the skin and kidney stimulated, the heart's action strengthened, and vascular tone heightened or lowered. More food can thus be assimilated, the quality of the blood improved, and its distribution favourably influenced, and the escape of waste and poisonous material made easier.

The period of sceptical inaction has now been over-passed, and there is no disease, however obstinate or malignant, which we may not cherish the confident hope of yet being able to overcome. We do not at all despair of yet finding some means of effecting the cure of cancer, that most dreaded of human ills. For, if the myxœdematous state, with no natural tendency to recovery, can be removed, and if syphilitic growths can be caused to disappear, by means of mercury or iodine, why should the tissue change which we call sarcoma be insusceptible of cure? In the same way, if acute processes like rheumatism and malarial fevers can be kept in control, by salicylic acid and quinine, how can we give up the hope of controlling other conditions of an allied kind?

We enter on the new century with the hope and expectation of triumphs even greater than those which have marked the period just passed. The last half-century has been marked by the great progress made in surgical science and practice.

Is there any cure other than that which nature herself effects? The answer may fairly be, "Yes." We can effect genuine cures by removing causes of diseases, killing or expelling parasites, or putting an end to sources of irritation; or by counteracting or getting rid of poisons which have entered the body or been produced within it. In many of these cases the natural efforts by themselves fail to take effect, and art must intervene if there is to be cure. The cause being removed, it, of course, remains for the natural forces to bring about recovery from the effusion, ulceration, or other results, which have in

the meantime been occasioned. For certain diseases of the infective order, and others due to gland destruction or derangement, we can come to nature's help, in such a way that cures are produced, where her more tardy efforts would have come too late. Where we seem to produce a cure, almost entirely by means of drugs, as in the case of syphilis or malaria, we are doubtless coming to nature's help in a similar way, though her own part in the process is not yet clear. These are the most striking instances of actual cures for which we can claim credit. But in very many other cases much can be done by a judicious combination of general and pharmaceutical methods

ADDRESS IN OBSTETRICS AND GYNÆCOLOGY.

By Ralph Worrall, M.D., M.Ch. Q.U.I., Gynæcologist to Sydney Hospital, President of the Section.

At Sixth Intercolonial Medical Congress, Hobart, 1902.

THE PROGRESS OF GYNÆCOLOGY SINCE THE FIRST INTERSTATE MEDICAL CONGRESS, AND THE RELATION OF GYNÆCOLOGY TO GENERAL SURGERY.

My first duty is to gratefully acknowledge the high distinction which members have conferred upon me by my election to the Presidency of the section of obstetrics and gynæcology at this, the Sixth Intercolonial, or as it is now, Australasian Medical Congress. No one more clearly recognises than myself how imperfectly I must appear to fill a position which has recently been adorned by that patient hero and true scientist, the late Dr. Way of Adelaide, and by my learned and eloquent fellow-countryman, Dr. O'Sullivan of Melbourne. I can only hope you will remember that "to have meant well, tried a little, and failed much" is as high an encomium as can truthfully be spoken of the majority of mortals.

Custom has ordained that discussion shall not follow a presidential address, and, therefore, it is good taste for the matter of such address to be as little controversial as possible. This necessarily limits one's choice of a subject and entails an increasing difficulty for each successive president.

In thinking over the question it appeared to me that as this, the sixth Congress, completes the round of the various capitals of Australasia, one might with propriety and advantage glance over some of the advances in obstetrics and gynæcology which have taken place since the

first Congress at Adelaide, sixteen years ago. I do not intend to weary your patience by making it in any sense an exhaustive review, but shall merely touch upon those points which have most impressed myself.

First: *As regards Obstetrics.*—Perhaps the greatest advance is the perfecting of the technique of Cesarean section, and the firm establishment of this operation as the proper procedure in all cases in which a living child exists in utero and cannot be delivered alive through the natural passages. I would here state my belief that where there is *permanent* and insuperable obstruction, instead of excising portions of the fallopian tubes in order to sterilize the patient, it is wiser to do a supravaginal amputation of the uterus, leaving the ovaries. By this means future pregnancies are prevented with absolute certainty, which cannot be said when even the entire length of both tubes are excised. A case in proof of this statement I have myself seen. The operation can be performed more quickly and more safely, for the patient is spared all the immediate dangers of the puerperium and the more remote dangers of intestinal obstruction and rupture of the uterus, should another pregnancy occur. Finally, the operation—if the Porro's method be adopted—can be approached with more confidence by country practitioners who may possibly have but a limited experience in abdominal surgery, and no skilled assistant.

The rapid removal of the child, a piece of rubber tubing tightly encircling the cervix, two knitting needles placed above the rubber tubing to prevent slipping, the amputation of uterus above the needles, which fix the pedicle outside the wound, constitute a procedure, first described by Tait, not in any way difficult, and giving the patient a fair chance.

It is, of course, understood that except under the above-mentioned circumstances the modern supravaginal amputation of the uterus and retroperitoneal treatment of the stump is infinitely to be preferred to the older Porro's method.

Craniotomy on the living fetus, except in very unusual conditions, is now universally condemned. I remember in the handbook of midwifery which I read as a student—I think it was by Lloyd-Roberts, of Manchester—there occurred a passage which more accurately translates medical opinion of to-day than it did that of 1878. "The man who would plunge a perforator into the head of an unborn babe would not hesitate, under the cloak of night, to use the dagger of the assassin."

Symphysiotomy, after a vigorous resuscitation, appears to be again receding in favour, and deservedly so, in my opinion.

The next great advance is, I think, the recognition of the immense value of abdominal palpitation in obstetrics. There is nothing which will give greater satisfaction and bring more credit to the practitioner than knowledge of this subject. By it he can ascertain the presence of twins, the position of the fœtus, the progress of labour, malpresentations of the head—such as occipito-posterior, or brow—and thus he is able to avoid useless and injurious attempts to deliver with forceps before the position has been rectified. Finally, all this information, and more, can be obtained without subjecting the patient to the slightest risk, which cannot be said of examination per vaginam.

Since the first Congress, the teaching regarding the conduct of the third stage of labour has been greatly altered. I say "teaching" advisedly, for I am inclined to think the *practice* of a large proportion of the profession in this matter is not in accord with the teaching of the chief schools, and most modern text books.

In looking over my notes of consultations of puerperal sepsis I find that in nearly half these cases there is a history of "some trouble in getting away the placenta," and perhaps "a little hæmorrhage," and the conclusion I have come to is that there is no one factor connected with the management of puerperal cases so potent for evil, so productive of death and invalidism as the forcible and early expression or extraction of the placenta. I am often asked "How long do you wait before expelling the placenta?" and I answer, "there is no fixed time." So long as the placenta is still in the uterus, and there is no hæmorrhage, one should patiently wait; keeping the hand on the fundus to detect uterine contraction and the movement of the placenta into the vagina, which elevates and makes more movable the upper uterine segment. I have upon one occasion waited one hour and three-quarters, and was then rewarded by the placenta coming away with scarcely any loss of blood.

If I might venture to give a word of counsel to those about to engage in midwifery practice, it would be this: Do not hurry the third stage and you will avoid much worry, loss of time, and loss of credit.

Another matter about which we have altered our ideas is the routine use of the douche before and after labour. We know now that douching is not necessary; that the antiseptic

does not remain sufficiently long in contact with the pathogenic organisms which may be present to kill them; that it may be the means of carrying infection into the uterine cavity; that it may re-open healed wounds and thus aid absorption; and that, finally, it may interfere with the beneficent bacteria, whose action is to render the vaginal secretion acid, and thus kill the pathogenic organisms which require an alkaline medium for their development. These remarks refer to normal cases. The douche, vaginal and intrauterine, is a valuable aid in the treatment of septic conditions, but it must then be regarded as an *operation*, preceded by thorough disinfection of the external genitals, and carried out by the medical attendant himself.

Finally, our knowledge of ectopic gestation has immensely improved. At the second, or Melbourne Congress, operations for this condition were so rare that some of us brought forward one or two successful operations as if we were entitled to no end of credit. Now such cases are of almost weekly occurrence in the chief hospitals of Australia.

In the diagnosis I have come to attach great importance to a steady drain of dark venous blood continuing for many days in some instances as suggestive of ectopic gestation, and as distinguishing it to some extent from uterine abortion, where the hæmorrhage is brighter, and more in gushes or clotted. In the very acute cases, no tumour is to be felt; merely a boggy, tenderfulness in the vaginal vault. This is not clearly stated in some text books, and is a matter of great importance.

As a means of clearing up the diagnosis in doubtful cases, I should like to call attention to vaginal cœliotomy. It is practically free from danger, and therefore no harm will have been done should our suspicions prove to be unfounded; while if vascular adhesions be present, as is not infrequently the case, the opening can be used for gauze drainage.

Secondly: In the domain of *Gynecology*, no change is so striking as the modern view regarding the treatment of uterine myomata, and the immense improvement in the technique of hysterectomy. Sixteen years ago such cases were generally left until the health had been seriously undermined, and the patient's sufferings were such as to induce her to beseech operation. Koeberle's serro-noed held the field as the method which gave the lowest rate of mortality, but it could not be used in what Lawson Tait called "the terrible cases," those in which there was extensive downward burrowing beneath the

pelvic peritoneum. That is, it was inapplicable to the cases which most imperatively needed operation, and, when it could be applied, there was a mass as large as a man's wrist or even his leg held outside the parietes by steel pins and strangulated by wire. The after treatment was, necessarily, most trying to patient and surgeon. I, like many others, relinquished this method because of these drawbacks, and for several years tried the combined method of pan-hysterectomy, loosening the cervix and tying the uterine arteries per vaginam, and then separating the remaining connections by abdominal section. I had considerable success by this operation, but it was always a trying one, and gave me much anxiety. One day I was fortunate enough to meet Professor Watson, of Adelaide, and he was generous enough to give me the result of his observations and experiments. Since then, "terrible cases" no longer exist. Cervical development and subperitoneal burrowing can be dealt with almost as easily as the pear-shaped tumour, by following the principles Professor Watson has so clearly laid down in his contributions to the *Australasian Medical Gazette*.

It has been asserted that Professor Watson's method is Howard Kelly's with slightly different details, but I think it will be granted that details constitute much of the art of surgery, and I claim that in his method of attack (opening up a rhomboid-shaped space in the anterior blade of each broad ligament as a first step), Professor Watson has given us a detail of such importance as to warrant us in applying his name to the operation. Napoleon's method of attack gave him the victory over his rivals and increased his power to destroy; Professor Watson's method of attack gives it an advantage over rival methods, and increases our power to save.

Quite recently I have been told by patients suffering from myomata that their medical attendants advised them against operation on the ground that the mortality rate was terribly high. I trust these gentlemen will make themselves familiar with modern writings, or make a point of seeing for themselves the results of the modern operation. I have had, myself, a series of twenty-five consecutive recoveries, and then unfortunately had a death from sepsis in an unfavourable environment. Since this death I have had another series of fifteen consecutive hysteromyomectomies without a death to date, and the number would be nineteen if I were to include three other cases in which I amputated the uterus to facilitate

the enucleation of intraligamentary cysts, or because it was forming part of an abscess sac.

A mortality rate of one in forty-three cannot be considered high, and as other operators have had even better results it must be allowed that hysteromyomectomy is infinitely safer than the operations for chronic inflammatory disease of the appendages which are undertaken by the average surgeon with a light heart.

Trendelenburg's position was not known sixteen years ago. Dr. Florian Krug, of New York, sent me his frame for obtaining this position about thirteen years ago, and I think this was the first apparatus of the kind in Australia. I regard the position as of great value and as being an immense aid to pelvic surgery. It enables all the procedures to be carried out under the guidance of the eye and thus greatly lessens the danger of injuring important structures, while in conjunction with the reflecting retractors which I use, the most minute oozing point can be detected and dealt with.

The reversed Trendelenburg, that is the pelvis dropped five inches below the horizontal, is also worth much in certain cases. *e.g.*, where flushing is determined upon. By its use contamination of the general peritoneal cavity can be avoided in pus cases, and in ectopic gestation the saline solution can be made to carry blood and clot down into the pelvis and out at the lower angle of the wound.

The abandonment of the pedicle in ovariectomy and removal of the appendages, and the substitution for it of separate ligation of the vessels at the inner and outer end of the utero-ovarian vascular arch has been of striking value in lessening suffering and lowering the mortality rate of pelvic surgery. The late Dr. Way was the first, I believe, in Australia to alter the technique in this way, and that considerably before Kelly's book came out. I owe a knowledge of it myself to Professor Watson.

The next great step in progress which I have to chronicle is "the passing" of the pessary. When I was at the Melbourne Congress a gentleman was good enough to show me a large cabinet which he had had made solely for various kinds of pessaries: one might paraphrase Hans Breitmann, and exclaim, "Where are those pessaries now!"

No one who has given any thought to modern researches in the bacteriology of the vagina can fail to perceive how potent a factor for evil a pessary must be. The ordinary bacteria of the vagina are beneficent, but under favourable circumstances and in suitable pabulum quickly

become pathogenic. There is no better culture medium for organisms than the vaginal secretion which by being dammed back around the bar of the pessary has undergone decomposition.

The pessary then strongly favours sepsis and the endometritis and salpingitis which are its products. If medical men would only reflect on these facts they would be slow to adopt a mode of treatment so certain to prove mischievous. "Do nothing, rather than do anything wrong" is a rule which might with advantage be more frequently observed.

Unfortunately even the newest English text books still figure pessaries and teach their use, and one has regretfully to look away from the old country for teaching in gynecology in accord with recent scientific advances.

For my own part I have abandoned the use of pessaries, except for a week or two in cases of retroversion of the gravid uterus, and in old women whose tissues are too atrophied to make operation of value.

For mobile backward displacement of the uterus, Australian gynecologists are generally agreed that Alexander's operation is the best treatment to adopt. I learnt the operation from its originator, Dr. Wm. Alexander, of Liverpool, and introduced it into New South Wales seventeen years ago. Resorted to both here and all over the world in unsuitable cases and by men who were not familiar with the proper technique, it soon fell into disfavour, only to be again revived and established, as, on the whole, the best means of giving relief in a very common and important lesion.

When the uterus is fixed, in other words when salpingitis is associated with the retro-displacement, Alexander's operation is now held to be contra indicated unless it is preceded by opening Douglas's pouch and separating the adhesions. In such conditions, however, the more generally accepted plan is to do abdominal section and ventro-suspension of the uterus. The dangers during pregnancy and labour of too firm a fixation are now well-known, and avoided by taking up but a small area of the fundus uteri, and uniting it to peritoneum and sub-peritoneal tissue only.

Procidentia uteri, up to a few years ago, was the opprobrium of gynecology. All sorts of operations were devised for its cure, and many surgeons exercised their ingenuity in planning differently shaped denudations of the vagina; until finally it was proposed that the anterior and posterior vaginal walls should be united so that a bar might be formed upon which the uterus might rest; the vagina was, in fact, obliterated.

The cause of failure lay in the non-recognition of the multiple causes which were at work in producing this condition, and that as there was not one lesion but several, unless all were remedied, *and at the same time*, a relapse was fairly certain to occur. Here again Alexander's operation has proved of great service, for unless the posterior surface of the uterus received the force of intra-abdominal pressure, although we might have diminished the size of the uterus by curettage and resection of the cervix and strengthened the vaginal walls by anterior and posterior kolporrhaphy and perineorrhaphy, the retro-displaced uterus gradually sagged down, and destroyed the effect of our efforts.

In the operation as now practised by myself and others, all these various procedures, with the addition of Alexander's operation, are performed at the same sitting. We call it at the Sydney Hospital, "the altogether." The results are excellent. Indeed, I know of nothing which gives more satisfaction to both surgeon and patient than this treatment of procidentia, and the gratification is all the more in that the method does not involve risk to life. Of course, in old women, when the tissues are atrophied from senile changes and pressure atrophy operation is not indicated. I find wool tampons the best palliative treatment under these circumstances.

I cannot refrain from again referring to vaginal celiotomy. Apart from its value in diagnosis (to which I have already alluded), it is, in my opinion, a real life-saving measure in pus cases; e.g., a woman is desperately ill with pelvic suppuration. An incision is made into Douglas's pouch, and a large quantity of encapsuled pus evacuated. If pus sacs are detected they are punctured with a sharp scissors or finger, and emptied also, and a rubber drainage tube stitched in the opening. In a week or two the general condition has immensely improved, permitting the removal of the diseased structures by abdominal section with comparatively slight risk.

Again there may be no encapsuled pus in Douglas's pouch, and no constitutional disturbance, but one or two large pus sacs are detected on bimanual examination; the pouch is opened, the pus withdrawn from below, and the cavities disinfected, so that at the abdominal section, *immediately* performed, all danger of fouling the general cavity of the peritoneum is avoided. For the past two years in all cases in which I have suspected pus or dense adhesions I have, as a routine procedure, done a preliminary vaginal celiotomy, and

inserted a single strip of gauze into the pelvis. To fill the pelvis with gauze is, I think, a mistake; used thus it seems to act like a cork, blocking, instead of favouring drainage. A single strip is all that is required.

The results have shown a great improvement. Last year I operated by this method in the Sydney Hospital on thirty-one cases with one death, and that one was moribund on admission from septic peritonitis. The mortality rate prior to my adoption of this method was more than twice as great.

I am not aware that any previous writer has advocated the systematic employment of vaginal coeliotomy as a preliminary to abdominal section for suppurative disease of the uterine appendages and pelvis abscess—its product. There has been, and still is, a fierce controversy as to the relative merits of the vaginal or abdominal route in dealing with pelvic suppuration. What I urge is the employment of both in the way I have just described.

Before concluding, I think it right to say a few words upon the relation of gynaecology to general surgery. A case of general surgery comes into the consulting room of a gynaecologist, and is straightway sent on to a general surgeon, but in reversed circumstances, there is, as a rule, no reciprocity; the general surgeon considers himself quite entitled to keep the gynaecological case which comes to him, and, what is more, there is a growing tendency upon the part of the general practitioner to think it is immaterial whether he sends gynaecological cases to a surgeon or specialist in gynaecology. From the patients point of view, is it immaterial? That is the question that should be asked and answered. It must be admitted at once that the well-trained general surgeon can do much of the gynaecologist's work, but which can do it best, and with least risk to the patient?

No man, however capable, can hope to master every portion of the vast field of general surgery; it is still more impossible that he can become in addition an expert in the special branches. Gynaecology is a wide and difficult subject, with hundreds of workers in all parts of the world. A man in a large practice finds it no easy task to keep in touch with the progress which is daily being made. If the general surgeon endeavours to do so it can only be by neglecting much in his own sphere.

While gynaecology belonged to general surgery it was absolutely stagnant and stationary, but when, twenty years ago, it became a special branch to which earnest men devoted their whole time and energies, progress came by leaps and bounds, and gynaecologists showed the way

in liver, spleen, kidney, and intestinal surgery. It cannot be denied that not alone in gynaecology, but in every branch of science, advance has been along the lines of specialism.

I say then, that work will be most satisfactory to both patient and doctor which is done by the man whose mind is saturated with the literature of his subject, and indented with a thousand impressions which experience has made regarding the cause, course, and complications of the disease, and the manner in which they may best be met.

If every medical man would do as he would be done by (and I am proud to think this is true of the vast majority) it would be no longer possible to occasionally say "Dr. A. sends his relatives who are gynaecological cases to a specialist, but his private patients, suffering in the same way, to a general surgeon."

If I have in this short and imperfect address dwelt much upon the triumphs and progress of gynaecology, it is not because I do not fully recognise that there have also been failures and recessions; one has only to recall the abuse of curettage and trachelorrhaphy, the delusions regarding anterior displacements of the uterus, and the wholesale removal of ovaries but slightly diseased, to admit this. But, as the incoming tide flows and ebbs, yet ever surely and steadily gains upon the trampled sand, so our art, although its advance is sometimes checked, or even becomes converted into a retreat, yet ever presses onward to that beneficent goal, the relief of human suffering and the prolongation of human life.

That goal will be more completely attained in proportion as we have men in our profession who do not hesitate "to scorn delights, and lead laborious days" in order that they may not fail to march in the van of surgical progress.

ADDRESS IN SURGERY.

By Louis Edward Barnett, M.B., C.M. Edin., F.R.C.S. Eng.; Lecturer in Surgery, University of Otago, New Zealand.

At the Intercolonial Medical Congress, Hobart, 1902.

THE PROGRESS OF SURGERY.

(ABSTRACT).

AFTER reference to the death of Queen Victoria, Dr. Barnett said that during the Victorian era, surgery advanced, not steadily, but by leaps and bounds. In olden times there were epochs in surgery, the epochs, for example, of Hippocrates, of Harvey, of Paré, and of Hunter. Prominently did these men loom down the

vista of surgical history, but they shrank into insignificance when compared with those two mighty discoveries of Victoria's reign—anaesthesia and asepsis. With regard to anaesthesia, he emphatically declared that there were still far too many deaths from chloroform, and he believed the reason was due to the fact that chloroform was far too frequently administered. Ether, as the safer, should be the routine anaesthetic until something still safer was discovered. Chloroform, administered by an expert anaesthetist, was probably safe enough, and was simpler and pleasanter to administer than ether, but expert anaesthetists were few and far between. In many medical schools the administration of anaesthetics was inefficiently taught, and men went into practice unable to administer anaesthetics properly. Many of them preferred the simplicity of chloroform, but they did not heed sufficiently its dangers. He was of opinion that deaths from chloroform occurred most frequently at the hands of young house surgeons in the public hospitals. He was aware that in a few of the public hospitals, especially those associated with the medical schools, there was an expert anaesthetist appointed to administer and to give instruction in anaesthetics.

There could be no doubt also that a considerable number of men understood the administration of ether, and appreciated its safety and other advantages. It required only a little practice to give ether well. It was far safer than chloroform, and his experience was that it did not make the patient sick for so long afterwards. Ether sickness soon passed off, while chloroform sickness lasted for days, and he had known chloroform sickness to end fatally. Now, to the average man, he made bold to say, "Learn to give ether, and give it freely, and give it often. Follow the lead of America, and reserve chloroform for the special cases." Then there would not be so many inquests, and patients would not have such a dread of going under an anaesthetic. Medical men had learned that the more careful and thorough a surgeon was in every detail of antiseptic technique, the better it was for the patient. It did more harm than good to swab and douche healthy living tissues with antiseptic lotions. Bacteriology had in recent times risen from oblivion to a fascinating study of vast dimensions, and of immense practical importance. There was a little army of patient investigators in the different laboratories, digging and delving among diseased tissues, sowing and cultivating the tiny germs, with no thought of monetary gain, for the medical scientist never placed a

price upon his work. Let the hope be cherished that among the workers there would soon arise one who would solve the problem of cancer, that great and increasing scourge which has baffled the investigations of so many able pathologists. One of the most brilliant pieces of work in connection with bacteria had been the discovery and use of antitoxins, which had proven so beneficial in certain diseases, notably diphtheria, the mortality from which has been thereby most materially reduced. Another advance of undoubted importance, and one intimately related to the subject of bacteriology, is the employment of the Finzen, or blue-light rays, in the treatment of lupus, rodent ulcers, and cutaneous diseases. Cases of lupus and rodent ulcer had been cured by the X Rays, as numbers of carefully recorded cases testified. Light, as an illuminant, had also been by so many devices made more and more useful to the surgeon. A distinct advance had been made in the local treatment of hæmorrhage by supra-renal extract. Advances into regions and against diseases previously sacred to the physician had been characteristic of latter day surgery. Wherever medicine alone had shown itself powerless for good, surgery had been summoned to its aid. Consequent upon a spirit of scientific inquiry had been evolved the wonders of brain surgery and of abdominal surgery. What numbers of patients had been rescued from death by modern surgery? As an example of the great progress that had been made in abdominal surgery, he emphasised that invaluable operation which had deservedly become common, gastro-enterostomy, an operation which men and women now walking about in comparative health and comfort had reason to be thankful for. In his advances into new and oftentimes dangerous regions, the surgeon was sometimes worsted, but the victories far out-numbered the defeats, and to the credit of modern surgery stood hundreds of operative procedures, established by the experiences of physicians as well as surgeons, as the best and safest remedies for the diseased conditions concerned. He maintained that any practitioner who aspired to a surgical reputation should pass through what one might call a surgical probation. In conclusion, he referred to the mortality caused by disease in the South African war.

Maori Women as Nurses.—Replying to an application from Maori women to be allowed to become hospital nurses, the trustees of the Wellington Hospital N.Z., state that the question of race would not act as a bar, providing the women are eligible by experience, and are well-educated.

ADDRESS IN PUBLIC HEALTH.

By Thomas Cherry, M.D., M.S., Melb.; Lecturer in Bacteriology, University of Melbourne.

At the Intercolonial Medical Congress, Hobart, 1902.

THE ETIOLOGY OF TYPHOID FEVER.

(ABSTRACT).

DR. CHERRY said typhoid fever shared with tuberculosis and cancer the distinction of being the most important of the diseases throughout Australasia. The deaths for the Commonwealth and New Zealand for 1896-7-8 were great. Typhoid was so serious, also, because it carried off so many of the young and vigorous, just when their powers had arrived at maturity. He showed that typhoid was no longer contagious in the old sense of the word. We know now that the patient may be touched and handled without danger, and if the community could be educated up to the present state of knowledge of prevention, it might be safely said that the whole of the disease would disappear in the course of a single generation. The colon bacillus had so many points of resemblance to typhoid that the two were regarded as members of the same group. He dwelt on the relationship of the typhoid bacillus to the colon and allied forms. Cases were quoted showing the long periods of time that the bacilli can exist without causing symptoms. The bacillus was discovered in 1884, and probably no single organism had received a larger share of attention ever since. Advancing knowledge seemed, for the present, to upset old ideas and created confusion, a darkness, it was hoped, that preceded the dawn. The bacilli, he explained, contaminated the soil, milk, drinking water, and other ingesta. In some cases the source of the poison cannot be traced, hence many authorities have believed that typhoid fever may sometimes arise spontaneously. The facts ascertained with regard to the outbreak of typhoid fever were, briefly, that in very few cases is there any evidence of direct contagion from the sick to the healthy. In a considerable number of cases especially of isolated cases, no direct or indirect contagion can be proved. In a large number of cases, especially in large epidemics, typhoid arose among persons who drank unfiltered and unboiled water, into which the germs had got. Dr. Schrader, of Berlin, observing typhoid epidemics, chiefly in England and Germany, gave the following results in 650 cases:—Attributable to water on 462 occasions; milk,

110; other stuffs, 23; clothing, bedding, etc., 23; all other causes, 43. While the above observations could be relied on, still many sporadic cases, and not a few epidemics, had had origins which could not be so explained. More attention should be devoted to the way in which bacteria are distributed by flies and dust. If a fly was caught and left to walk on the surface of a prepared plate, its footsteps would, in the course of 48 hours, be marked by parallel rows of tiny colonies of bacilli, many of which would be found to be fever organisms. The fly itself probably deposited only one or two bacilli at each contact with the plate; but these rapidly multiply, till, in the course of 48 hours the colonies grow to the size of a pin's head. Similar facts hold good with regard to particles of dust. The fly obtains the organisms on its feet simply because these bacilli are practically ubiquitous in the neighbourhood of human dwellings. This went far to explain the disappearance of typhoid fever as soon as an efficient system of drainage is introduced into places where it was rife before. Where cesspits and closet pans are in use, flies have access to their contents, and may convey the bacteria direct to articles of food and drink, thus allowing, in some cases, for a colony of the bacteria to be developed before the food is eaten; or the flies may convey them indirectly by alighting in the gutters and other damp places in the neighbourhood of a house. A trace of organic matter was sufficient to enable the typhoid bacilli to multiply, and thus the germs may be conveyed a distance from the original focus, and contamination be distributed to water, milk, and foodstuffs. Dust settling on roofs of houses was often washed into tanks of drinking water, carrying fever germs into it. His conclusions were as follows:—

- (1) Many mild cases of fever are slight attacks of typhoid, and may serve to distribute the contagion.
- (2) Typhoid fever itself may be a composite disease, or a series of diseases caused by closely allied organisms.
- (3) While from the bacteriological evidence the *de novo* origin of the disease is not disproved, still, a general survey of all the known facts enables us to explain most cases without having recourse to this hypothesis.
- (4) Typhoid fever at once disappears from a community with the introduction of a proper system for the disposal of excrement and household refuse. In towns, this can only be done by a properly constructed water carriage system of sewerage.

- (5) The disease is spread chiefly by the contamination of water, milk, and articles of food. In hot countries, at least, flies and dust have a considerable share in bringing about this contamination.
- (6) The length of time during which the bacilli can exist outside the body is unknown. There is evidence to show that the contagion hangs about old cesspits and contaminated soil for several years.

NOTES ON INTUSSUSCEPTION, WITH A CASE IN WHICH THREE INCHES OF BOWEL WERE REMOVED FOR GANGRENE—RECOVERY.

By Eneas J. McDonnell, M.D., Hon. Surgeon to Toowoomba Hospital, Queensland.

For some time past I have wished to open a discussion on this subject, but owing to difficulties in getting down to Brisbane, I have put it off; however, I have now asked Dr. Bancroft to read this paper for me.

I shall not weary you with details of the pathology of intussusception and its symptoms, these are found in any text book and are to my mind unnecessary and wearisome padding in a short paper such as this will be.

I was very pleased in taking up the last *British Medical Journal*, September, 7th, 1901, to find Mr. Edmund Owen lay down as a dictum that all cases of intestinal obstruction are surgical, and that in intussusception, prompt abdominal section is the only scientific and practical way of supplying relief. This is of course in other words what Mr. Clubbe has been pointing out in Sydney, only Mr. Owen goes further and has no intermediary stage of trying injections.

My experience, though limited, bears out what he says. I can remember how all cases were treated with various kinds of injections and sometimes the child got well and often it did not; it always struck me as a very haphazard kind of treatment, I was always puzzled as to whether the intussusception was really reduced or not, and luck seemed to enter into the treatment very largely.

When, over two years ago, I suggested immediate and early abdominal section I met with a very firm opposition from the parents, mainly, I think, based upon the age of the patient, and the well-known character of the trouble, in which there are periods when the

child seems getting better, and the friends are anxious to wait and give the sufferer a chance (!) However, in two cases I insisted, and got the parents' consent, operated within an hour of seeing each child, and both recovered.

Perhaps I have been lucky, but out of 148 cases of laparotomy in all kinds of abdominal work, I look upon these two as giving me least anxiety afterwards; in less than 24 hours the children were bright and cheerful, and there was little or none of the symptoms of shock or collapse.

In the last two and a half years I have seen six cases of intussusception. In four of these the parents refused any operative interference—indeed in two they would not allow any attempt at reduction and questioned my diagnosis—in the other two inflation and injections were tried, in one case with apparently good results, in the other with none. All four died. Of the two cases I operated on both recovered.

The notes I have of the cases are:—

(1) Infant 11 months old, brought 35 miles in April, 1900, first attack 12 hours before, all usual symptoms present. I removed to hospital, and with finger in rectum could feel the tip of the intussusception. With injection of water this was apparently all cleared away, but on child straining it could easily be felt again. I opened abdomen in mid-line, and easily reduced the intussusception, the child made an uninterrupted and uneventful recovery.

(2) Infant aged 10 months, brought to me after 32 miles driving, August 13th, 1901. Symptoms fourteen hours duration, abdomen tense. Operated on within one hour. On opening the abdomen about 1½ ozs. of rather cloudy fluid escaped. The intussusception had begun in the ileum, about three inches from the ileo-cæcal valve, and had got away to the descending colon. It was reduced easily until the last, when a considerable amount of difficulty was experienced. At length this was overcome.

As there appeared considerable oedema and dark redness for about an inch of the gut, I passed a rod through the mesentery and fixed this portion on the outside for observation, stitched up the rest of the wound, placed a sterile pad over the protruding knuckle of the bowel, and put the child back to bed. Eighteen hours afterwards there was a distinct ring of gangrene; under an anæsthetic I pulled out more of the bowel again, and removed the gangrenous portion with scissors, getting my assistant, Dr. Garde, to clamp the bowel with his fingers; finding the mucous membrane gangrenous I slit up the bowel carefully until I

reached healthy tissue, and then removed; in all three inches were taken away. I stitched the peritoneum of one side of the mesentery to the other, including the bleeding vessels by a continuous suture, and tied both ends together, thus approximating the mesenteric ends of the divided gut. I next passed a Lambert's suture at the free edge of the gut and left it long enough for convenience in holding. By traction on the mesenteric and distal threads I had a fairly good surface for a continuous suture, which I did rapidly. Then by turning the gut over I finished the suturing on the other side, cut the long cords, and dropped the gut back. In this case I felt it wise to put in a glass drain for 24 hours. The child had some gastric disturbances on several occasions, but with each a tooth appeared, so any symptoms were masked by teething.

I kept child under observation for four weeks and then sent home. A week afterwards they brought it back with vomiting, etc.; in 24 hours with appropriate treatment the child was well again and another tooth had appeared. They now report the child in excellent health.

Both these results I may claim as good, and as each case occurred at a distance, valuable time was wasted in bringing them over rough roads.

Any further cases I get I intend resorting at once to laparotomy at no matter what stage the case is, unless it is actually moribund, in fact, practically, to treat the case as an irreducible strangulated hernia.

Perhaps some exception may be taken to my statement of treating intussusception as an irreducible hernia; to this I can only reply that unless I can feel *sure* that the reduction can be safely effected and when effected is certain, *i.e.*, not likely to recur, I can see no reason to change my views, and as to the risks of both methods of treatment any of us who have had experience in abdominal work can quote cases in which we have regretted temporising and wished we had operated boldly and at once.

[Read at the February Meeting of the Queensland Branch, British Medical Association.]

VICE-REGAL VISIT TO THE HOBART HOSPITAL.—His Excellency the Governor, Sir Arthur Havelock, accompanied by Lady Havelock, and private secretary, recently paid a visit to the Hobart General Hospital. The party was met by the chairman of the board, and the honorary medical and resident staff, and conducted over the institution. Prior to leaving, His Excellency made a note of his visit as follows:—"This institution is an admirable one, well constructed, well equipped, and well managed. The Government and the Board of management have reason to be proud of it."

TRICHINA SPIRALIS.

By E. Angas Johnson, M.D. M.R.C.S., Assistant Physician to the Adelaide Hospital, S.A.

As this is the first authentic case of trichina spiralis, which has occurred in Australia (so far as I can ascertain) I thought, perhaps, it would be of interest to record it.

January 30th, 1902.—W.H.C. of North Adelaide, male, *æt.* 44, married, painter by trade, born in and never been out of the colony. Consulted Professor Watson and myself for a cancer of the lower jaw on the right side, allowing us *carte blanche* for its removal.

Previous Health.—Scarlatina at 4 years, which left him deaf in the left ear, and arthritis of his right temporo-maxillary joint, which is now ankylosed. Typhoid fever 14 years ago. Plumbism, three or four attacks since the typhoid.

Examination.—A thin, anæmic man, who said he was rapidly losing weight. On the lower jaw, on the right side, was a tumour, fixed to the jaw, the skin freely moveable over it, except where it was fungating through the previous operative incision. His heart on being examined gave evidence of aortic regurgitation and obstructive murmurs, as well as a mitral regurgitant murmur. Concerning the operation I will say nothing, since that will afford further notes at a later date when the subsequent treatment of the case will be recorded as well.

February 3rd, 1902.—Whilst cleaning out the glands in the neck, the muscles, *i.e.*, sternomastoid, sternohyoid, omohyoid, and digastric, were found to be studded with small white specks resembling the ova of *pediculus capitis*. These deposits were noticed to be much more numerous towards the tendinous ends of the muscles than in the muscles themselves.

I particularly want to draw attention to the fact that this patient has never been out of the colony, that he has been a big eater of polonies (sausages) and that he was treated for typhoid fever 14 years ago. I was able to get the notes of his supposed attack of typhoid, they are very brief and as follows. When seen by the doctor for the first time "he had been ill for three weeks with dull heavy pains in the forehead, back of head, chest, thighs, right side and general debility, also a slight cough. He had been in bed one week before he saw the doctor, and remained two weeks more in bed by which time the pains had entirely disappeared. His temperature was 100.4° in the morning and 102° in the evening that he first

came under medical notice and then? was normal for the rest of the illness.

Whilst I was a student at Göttingen I had ample opportunity for studying trichinosis. The first body I dissected in the anatomical department was affected with this disease, and later on I saw other bodies with it. All the butcher's meat consumed in Germany, has to be inspected and if fit for consumption it is passed, and is branded with a government stamp. In Göttingen any that is doubtful is sent into the Pathological Institute under Professor Orth's direction, for examination. Professor Orth especially noticed that the trichinal larvæ get encysted in the connective tissue of the intestines, and of the panniculus adiposus, so that sausage skins and lard have to be reckoned with as sources of infection. Also he is of the opinion that the trichinæ locate themselves in the connective tissue between the muscle fibres rather than in the fibres themselves.

Now that it has been discovered here, a further crusade against rats must be commenced, since the *trichina spiralis* is a parasite belonging to that rodent, and the pig gets infected from eating these diseased rats (which are frequently found infesting slaughter yards).

Dr. Thomas McCrae, medical tutor to the Johns-Hopkins' Hospital, Baltimore, said that Professor Osler, of that institution, had drawn special attention to the fact that in several cases which had come under his notice, there was a greatly increased leucocytosis, especially of the eosinophile cells.

In W. H. C. the trichina was encapsuled with lime salts, showing that the process was quiescent (not necessarily dead, since they have been found alive twenty years after entrance into the human system. Besides, W. H. C. was suffering from cancer, so that his leucocytosis was not a trustworthy one.

In the specimen obtained, the capsule was dissolved with a 25 per cent. solution of hydrochloric acid, and the typical worm disclosed, whose identity was confirmed by Professor Watson.

Of the symptoms and treatment, any of the modern text-books give very full information, so that further digression is not necessary.

20th February, 1902.—Mr. Desmond, the Government Veterinary Surgeon, to whom I gave a fresh piece of the sterno-mastoid tendon, is experimenting with mice and sparrows, and, no doubt, will give a good account at a later date of his work.

Typhoid has not prevailed to any extent at Zeehan, Tasmania, this summer. One case has been admitted to the Strahan Hospital from Kelly Basin.

THE TREATMENT OF MIDDLE EAR SUPPURATION.

By Richard Arthur, M.A., M.D. Edin., Hon. Asst. Surgeon, Ear and Throat Department, Sydney Hospital.

(An Address read at the Intercolonial Medical Congress, Hobart, to open discussion on "Treatment of Middle Ear Suppuration.")

I do not know of anything which induces profounder conviction of the truth than having to sit down and compose a paper on a well-worn medical subject.

To set out such a subject in a revolutionary light, one would require to be either a genius or to have the capacity for taking pains, which, if not genius, is at least a presentable substitute for it. Now, I am neither the one nor possess the other, and so must tread the beaten path of authority, bringing forth from my store only things old and familiar.

If I dogmatise, it is simply to evoke discussion, and I trust all my assertions are tempered with the humility born of limited experience. For my part, I shall gladly sit at the feet of the Gamaliels who will continue the discussion. That very wise surgeon, Sir William Banks, writes in last week's *British Medical Journal*:—"Nowadays, it is the man who appeals to experience who is considered the ass. The idea is that there is no time to attend to persons who mildly plead long experience as a reason why they should be heard."

Now, in the matter of respect for experience, I am a man after Sir William's own heart, however much I may admire the young bloods of to-day whose papal attributes excite one's envy and amazement. And having thus, as I hope, disarmed criticism as to my short-comings, I will to the matter we have in hand.

The subject for discussion is the treatment of middle-ear suppuration other than the radical mastoid operation. I intend to limit my remarks in several ways. I am not going to touch on the treatment of acute suppuration, and I shall leave to others the question of operative procedures such as removal of the ossicles, of which I have had little experience.

I want to confine myself to the every day treatment of the condition popularly known as a "running ear." From the false perspective of an outpatient clinic, one is tempted to affirm in his haste that every second child among the poorer classes possesses such an ear. Of course a statement of this kind would be absurd, and yet the temptation to make it indicates the prevalence of this form of ear

disease. Nor is there anyone so bold as to maintain the good old view that this flux from the ear is healthful, and can only be stopped at your peril—a view which illustrates well the dangers of faulty observation and induction.

It was sometimes observed that in cases of chronic otorrhœa when the discharge became scanty or ceased altogether, symptoms which one writer describes as of a "typhus variety," arose. The disease, according to the old writers, had been driven in—a theory much in vogue with regard to eczema, infantile diarrhœa, and other conditions. We know now the true explanation of this phenomenon, and recognise it as an argument in support of one of the basic principles of otology that a chronic discharge from the middle ear should be made to cease as soon as possible.

The dangers attending a chronic otorrhœa—you all know what they are—a portentous list of pyæmias, septicæmias, cerebral abscesses *et omne hoc genus*. That these dangers are there, no one denies, but it is of the utmost moment to determine to what degree they are there. An answer to this question is required before we can decide when a certain line of treatment should be abandoned, and something more drastic take its place.

I think it is MacEwan of Glasgow who says that he would rather have a charge of dynamite in his ear than a drop of pus, and arguing from this advises the mastoid operation in all cases that resist ordinary treatment for a certain length of time. My individual preference would be for the pus, and I would let it run for a long period before I consented to having my mastoid process shelled out, unless some more urgent symptom made its appearance. I am aware that in saying this I am running counter to many of the chief authorities of the present day. Thus at the discussion following the historic paper of Ballance's on "The Mastoid Operation" at the Royal Medical and Chirurgical Society, the majority of the speakers advised the radical mastoid operation in cases of long-continued and intractable suppuration in the middle ear. But before I allowed an operation on myself—which, after all, is the best test, I should want particular information about:—

1. The dangers of the operation and the anæsthetic.
2. The dangers to my facial nerve, and to what hearing power I had left.
3. The chances of the discharge continuing even after the operation.

When I knew all about these, I should be prepared to weigh them against the risk of

continuing to treat my otorrhœa by the usual methods. I have not been very successful in finding statistics with regard to the mortality from suppurative ear disease, but in Schwartz's clinic at Halle there were 89 deaths out of a total of 5,074 cases of middle ear suppuration, a death rate of 1·7 per cent. This seems a high mortality, but I think no accurate deductions can be made from these figures. It is probable that many of the fatal cases had never had any previous treatment, and were admitted into hospital in a dying condition. One would need to know how many of these cases developed mastoid and cerebral symptoms while undergoing regular treatment for chronic otorrhœa. I think myself, that the number would be found to be very small. It is impossible to get any accurate figures on this point from the vital statistics of the Australian States. Thus, out of the 15,000 deaths in New South Wales in 1889, only 11 are ascribed to chronic suppurative otitis, the other cases being without doubt, hidden away under the heading of meningitis, cerebral abscess, etc. An American writer, Sheppard, gives the frequency of death as a result of ear disease as compared with the total number of deaths, 119 in 38,000, 0·3 per cent; but here again the result is vitiated for my purpose by lack of information as to the previous treatment of these cases. With these figures before me, I would, I think, accept the risk, a risk comparable to drawing a prize in Tattersall's, and trust to the surgical skill of my confrères to pull me through if the worst came to the worst. By this I simply mean that I deprecate the performance of the mastoid operation merely because a purulent discharge has continued for a considerable time from the ear, and has failed to respond to treatment. And I am prepared to admit that the number of such cases is very large. How often do we really cure a chronic otorrhœa? An acute purulent otitis can almost always be satisfactorily dealt with, a chronic case will exhaust all our remedies and patience.

For, when we set out to cure a case, what are the results we desire to bring about? First of all we want to stop the discharge, and then to heal the perforation through which this is flowing. If the perforation cannot be closed, the next best result is the lining of the tympanum with epithelium, and a cure should also mean that the discharge will not return, or at least that there should be no greater chance of its recurrence than of its arising in an ear which has never been affected. Now, my experience is that it is by no means easy to bring these various results about. It is not

difficult, as a rule, to lessen the amount of the discharge or remove the fœtor. But to ensure a perfectly dry tympanum is another matter. Do what we will, there often remains a trace of pus on the floor of the meatus, or the inner wall of the tympanum continues moist. And Nature, in a perverse mood, has a way of keeping perforations open, even though all discharge has ceased, and one coaxes the edges with all sorts of stimulating applications. And when the loss of membrane is so great that closure is out of the question, the papering of the tympanum with epithelium is in many cases a most tedious process. Half, or perhaps two-thirds of the inner wall gets satisfactorily covered, but a small area remains red and damp, and on to it the epithelium will not pass.

But grant that the discharge has stopped, the perforation closed, or the tympanum become lined, we have not yet reached our Promised Land. Nothing is more disheartening than the way in which a purulent discharge will return on seemingly little or no provocation. The closing of a perforation does certainly eliminate the risk of continued infection through the meatus, but that risk is only a minor one. The chief source of infection or re-infection is by way of the naso-pharynx, and this route is very difficult to control. I believe that once the Eustachian tube has been made the channel for the conveyance of septic infection to the middle ear, there is established a predisposition for similar infections to select again the same road, and that in this way danger is always threatening the tympanic cavity. Or may there not remain a condition somewhat of the nature of a gleet which any congestive or catarrhal process will stir into renewed activity?

The history of so many cases is that there has been an intermittent discharge, a discharge which has sometimes ceased for years, but seems inevitably to return. We must believe that these cases have reached again and again a stage of cure of unstable equilibrium which a very slight cause will upset. And so the vicious cycle goes round.

I am simply arguing that brilliant successes are not the rule in the treatment of chronic otorrhœa. It may be that a wider experience will prove this conclusion to be unduly pessimistic, or that criticism of this paper will acquaint me with methods which will give more satisfaction than those I have employed. And I will confess that the temptation to draw a gloomy picture may have been stimulated by the desire to give emphasis to the ideal of all medicine—preventive treatment.

The otological status of a community, a phrase I have plagiarised from an American writer, is of sufficient importance to demand the closest investigation. And one of the first facts to appear is that the vast majority of cases of chronic otorrhœa begin in childhood.

The causes of this are the small size of the naso-pharynx in childhood, the prevalence of catarrhal and infectious diseases at that age, and the frequency of lymphoid hypertrophy in the naso-pharynx.

On this last factor I would lay the greatest stress. I believe that the existence of adenoids contributes more to the production of purulent otitis than any or all the other causes put together. While I do not dispute the importance of the role played by scarlet fever, measles and other zymotic diseases, I am convinced that in many cases the presence of adenoids is the necessary concomitant for the production of the ear trouble, and in others that it greatly aggravates the condition and afterwards prevents the return to the normal. So certain am I of this that I believe it is practically impossible to cure a case of chronic purulent otitis if the naso-pharynx is blocked with a mass of adenoid tissue, and one of the first steps in treatment should be the removal of the adenoid hypertrophy. To do this is only to act in accordance with one of the canons of surgery—to remove the focus of infection. There can be no doubt but that the popularisation of the adenoid operation will do much to reduce the number of the cases of chronic otorrhœa.

I feel strongly, also, that we should endeavour to impress upon the general practitioner the necessity for attention to the naso-pharynx and ears during infectious diseases. The need for this should be evident when Friederich states that at least 12 per cent of all cases of purulent otitis are secondary to scarlet fever, and Bezold points out that in 50 per cent. of these cases there is either total destruction of the membrane, or a loss of two-thirds of the disc. The former writer also states that the most characteristic features of this suppuration are an obstinate resistance to treatment, and a tendency to cautious destruction which frequently involves the ossicles as well as the bony walls of the tympanum and contiguous cavities.

The prompt recognition and efficient treatment of acute middle ear inflammation would prevent many of those unfortunate consequences, for I am inclined to think that the conversion of an acute otitis into a chronic is due mostly to a secondary infection through the meatus. Many cases of acute otitis with perforation, return to the normal without any treatment at

all, many others would do so also if a mixed infection could be prevented. I am not at all certain of the value of syringing with antiseptic lotions in acute otitis, and you are aware that some authorities condemn it altogether, but I am convinced that careful disinfection of the external meatus followed by packing with iodoform gauze, is indicated.

If all cases of acute otitis whatever be their cause, received vigorous treatment, I believe we would be called upon to deal with very few cases of chronic middle ear suppuration.

That this efficient treatment is not effectually carried out must be presumed from the large number of cases of chronic purulent otitis we meet with. These cases compose a large proportion of those attending out-patient clinics for the ear. And I am inclined to think that when the opportunity offers they wander from one hospital to another, suffering many things from many otologists.

I suppose the routine treatment practised everywhere is to prescribe an antiseptic lotion and some boracic powder, and to give instructions to syringe with the one, and to insufflate the other. Some of the cases undoubtedly are quickly cured, but we must not conclude too hastily that the treatment is responsible for this. For one occasionally meets with cases where the middle-ear is found perfectly dry and cicatrised, and yet the patients affirm that nothing has ever been done to the ears.

And, again, I fear we are somewhat prone to accept the patient's own statement as to the discharge having entirely ceased. I have often examined ears from which it was alleged there was no discharge and found that a trace of pus could be obtained by introducing a probe with cotton wool. If treatment be interrupted in such a case, matters may soon be as bad as ever, and the most horribly offensive discharge is sometimes to be found in cases where the amount of discharge is very slight.

Again, other cases improve up to a certain degree. The discharge lessens, and becomes odourless, but still it does not cease. And yet one cannot discover granulations or carious bone to account for this.

What is the reason? I believe that in a large number of cases it is due to the treatment not being carried out in an efficient manner.

The objects of treatment are :—

1. To cleanse the ear thoroughly.
2. To destroy or reduce the virulence of any pathogenic organisms present.
3. To guard against re-infection, either from the nasopharynx or from without.

How does the ordinary home treatment fulfil these conditions?

The sixpenny glass syringe which is generally used is not an instrument of much potency. I think it will be often found that the plunger affords so feeble a *vis a tergo* that most of the lotion remains in the barrel. It is certainly not able to remove the thick tenacious pus met with in some of the cases. And its asepticity is far from being above suspicion. I fear it is sometimes put to various domestic purposes, and is used ungrudgingly when the baby requires an enema.

Nor does the insufflated powder find its way as a rule far beyond the concha.

My contention is this, that many of these cases cannot be properly treated at home, at least in the homes of the poorer classes, and that we should seriously consider the advisability either of admitting them as in-patients, or of insisting on a daily attendance at the hospital. In this can we not learn something from our ophthalmic confrères?

The diseases in their practice which from its frequency and persistence may be likened to chronic middle-ear suppuration is trachoma. Now, whenever possible, bad cases of trachoma are admitted into a hospital, or at least the treatment is chiefly carried on at the out-patient department. No oculist that I know of leaves the application of the copper stick, or of strong solutions of nitrate of silver to the mother or elder sister of the patient. If this were done, I imagine that trachoma would be found an even more tedious disorder than it is under existing conditions of treatment.

The ideal would be to take the patient into hospital, and seek by rigorous treatment for a few weeks to bring about a cessation of the discharge.

In order to carry out the first object of treatment, the thorough cleansing of the ear, it may be necessary to use the syringe several times a day, in fact Professor McKernon, of New York, recommends, in some cases in children, that the ear should at first be irrigated every two hours until a lessening of the discharge is observed.

Occasionally the intra-tympanic syringe will be very useful, and I have found the apparatus devised by Dr. Hankins, of Sydney, by which the fluid is forced in at a considerable pressure by an air pump, to be of great service in some cases. A large amount of debris, inspissated pus, and epithelium can sometimes be removed by this when the ordinary syringe has failed to effect anything.

I have never been able to make up my mind as to the respective merits of the various anti-

septics recommended, and there exists no antiseptic so poor that some authority has not done it homage, and I am sometimes inclined to doubt the wisdom of using antiseptic lotions as a routine practice at all.

The solutions generally used, while not strong enough to destroy micro-organisms *in situ*, are capable of lowering the vitality of the tissues with which they come in contact, and thus make them less resistant to the germ invasion. If the object to be attained be the removal of the discharge, which by its putrefaction increases the intensity of the irritation and also affords a nidus for further bacterial growth, I do not see why this should not be effected by sterilized water, or by an alkaline lotion such as we use for the nose or throat. It was by prescribing a solution of bicarbonate of soda for this purpose that gave James Hinton part of his fame as an aurist. The alkaline lotion has the advantage of being bland and unirritating, and of having a certain solvent action on pus which would enable the tympanic cavity to be cleansed more thoroughly.

As long as masses of hardened pus and epithelium are pent up in the middle ear, all the antiseptics in the world will be useless to improve the condition of things. One of the few luminous sayings in that long and wearisome book of Albert Busk's is where he states that it is not far from the truth that if the beginner in otology has mastered the difficult art of properly cleansing the ear, he will find himself a master both in the diagnosis and treatment of diseases of the ear.

For the furtherance of this cleansing process I am a firm believer in the peroxide of hydrogen as an instillation in the ear, and this not for any antiseptic action it may possess, but from its mechanical property of loosening any inspissated discharge. It is true there has been a certain amount of hostile criticism of the peroxide. It has been said that there is a risk of driving back infectious material through the aditus, and thus causing involvement of the antrum. I cannot but think that this is merely a theoretical danger, and that the objection applies with equal or greater cogency to forcible syringing of the ear.

I would also insist upon the importance of getting the middle ear as dry as possible after syringing. To do this, the ear should be inflated by one or other method, and then all moisture carefully mopped out by cotton wool swabs. By this means any tenacious pus that has resisted the syringing may be removed, and the tympanic cavity rendered quite clean and dry. Having got the tympanum thoroughly

dried, the next question is—to insufflate or not to insufflate. To my mind, the answer to this depends entirely on the quantity of the discharge. If this be profuse, it is contrary to the principles of good surgery to place any obstacles to its escape, and the indication is for the use of gauze packing.

But on the other hand it will be found in cases in which the discharge is very scanty—a mere moistening of the tympanic walls—and where a large perforation exists, the firm packing of the meatus with boracic acid will often be very effective.

The secret of the success of this treatment I do not know. It might be presumed that it acted by cutting off the supply of oxygen from the pathogenic organisms, but unfortunately for this explanation, the staphylococcus, which is the bacterium most often found in middle-ear suppurations, flourishes equally well with or without oxygen.

It is possible that the pressure may act mechanically on the micro-organisms, or on the granulation tissue in which they exist. But whatever the reason, it is undoubtedly true that a few packings with boracic acid after careful cleansing of the tympanum will sometimes work wonders.

This leads to the question of the treatment of granulations. In pre-antiseptic days, astringent solutions were the chief means of treating chronic otorrhœa, when it was thought expedient to meddle with it, and sometimes they did good.

At present alcohol is the favourite remedy, and it has undoubtedly a marked effect in some cases. It is claimed for it that both astringent and antiseptic, though some authorities deny to it any but the feeblest germicidal action. It is said that a 50 per cent. solution in water has the most decided effect. I have used solutions of nitrate of silver of strengths from 1 per cent. to 12 per cent., applied by a cotton wool mop, and I believe it was of service.

Some American writers advocate pure carbolic acid in cases which resist ordinary treatment. The procedure consists in filling the auditory canal with carbolic acid, which is retained there from 30 to 60 seconds. The ear is then syringed with absolute alcohol.

I have not tried this method myself, but it seems reasonable, and I should like to know if any present have had experience of it.

Lastly, we have the curette, and I think many of the best results we obtain are got by its use.

I have found the solution of cocaine in anilin oil and rectified spirits very valuable in cases where curetting is indicated, cases which otherwise would have required a general anæsthetic.

By the curette, also, one can deal with areas of superficial bone caries and the stump of polypi. I think such treatment is preferable in the latter case to the application of chronic or tri-chloroacetic acid, or to the use of the galvano-cautery, which is sometimes recommended. I believe a thorough curetting, followed by alcohol instillations, will fulfil all indications in many cases.

I have sometimes wondered if in those cases where there is a large healthy-looking granulating surface on the inner wall of the tympanum, we could not expedite matters by seeking to fix skin grafts on this surface. After a preliminary curetting and disinfection of the granulating area, I do not see why the grafts should not sometimes become attached.

I will leave to subsequent speakers the task of dealing with the cases where the attic or even the mastoid antrum is involved in the chronic suppurative process. It is therefore unnecessary for me to discuss the important question of chronic discharge through a perforation in Schrapnell's membrane, or the indications for the removal of the ossicles.

CLINICAL AND PATHOLOGICAL NOTES.

The Light Treatment of the Staphylococcus Pyogenes Aureus.

AN interesting and inveterate case of abscesses which had been treated in the most faultless way by quite a number of practitioners, came under my care towards the end of last year.

It was that of a little girl aged five years who had been treated for specific disease, and who, for eighteen months was never without abscesses, rich in the golden staphylococcus.

Scores, or I might correctly say hundreds of cicatrices of these "blind boils" were in evidence over the whole body, but especially on the back, the feet, hands, fingers and toes. Part of one of the fingers had been destroyed by the disease, and left the hand much resembling illustration fig. 123 of "Tubercular Dactylitis" in a book on "Diseases of Children" by Ashby and Wright, 1896.

For the first two weeks of my attendance, I simply communicated with the first medical man who had attended, and watched the effect of the treatment of my predecessor. My own treatment did not appear to be of any avail either, until I determined to try the effect of the X-Ray light. At first I did so with much caution, but, feeling my way, increased the therapeutic dose, and after a very few applica-

tions the abscesses had a cessation. Then I omitted to tell the grandmother when the child was to be brought again, and when it was brought, the primary battery had "run down" so weak, that it would not work the coil, and ten days having elapsed the "boils" returned, but a smart application of the light promptly checked the disease again, and now, after two months have elapsed, no further abscesses have occurred, the child is progressing rapidly, and with a good appetite.

Remarks.—The light was from an eight inch spark coil (which I have been using occasionally in my practice for the past five years), and was used as strongly, on an average, as is required to easily mark out the bones in the hand. Each *séance* lasting from five to fifteen minutes, during which time the front, the back, the hands, and the feet were alternately exposed, as closely as possible, to the Crooke's tube. I am aware that a culture of this microbe is reported to be killed in a few seconds by the Bang light, and it has occurred to me that it would be interesting to try the effect of it on a culture of the plague bacillus with the view of removing the terror of plague.

J. CAPPIE SHAND, M.B.,

Formerly Physician for Diseases of Women and Children, Glasgow Public Dispensary.

North Sydney,

February, 14th, 1902.

MIRROR OF HOSPITAL PRACTICE IN AUSTRALASIA.

ST. VINCENT'S HOSPITAL, SYDNEY.

CASE OF FOREIGN BODY RETAINED FOR 28 YEARS.

(Under the care of Dr. Scot Skirving.)

Reported by D. KELLY, M.B., B.S. Melb.,
Resident Medical Officer.

MRS. H., *ætat.* 45 years, married, a multipara, was admitted under Dr. Scot Skirving to St. Vincent's Hospital, on January 14th, 1902, complaining of pain and tenderness in right buttock, which prevented her from sitting down.

Examination revealed a red and tender swelling in the right buttock, with a central pointing spot over the ischium.

Operation.—An incision was made over the central pointing spot, and a little pus exuded. On passing a finger into the wound and up under the gluteus maximus muscle, a foreign

body was felt, which on being removed proved to be a portion of a gum elastic bougie about six inches in length.

History.—On questioning the patient, the following history was elicited. When 17 years of age she became pregnant, and at the third month was taken to a woman, who passed an instrument on her with the intention of procuring an abortion. No abortion followed, but she carried her foetus to the seventh month, when she was delivered of a living child. She suffered from no inconvenience after the passage of the instrument till a couple of years ago, since when she has had slight pains and tenderness over the right buttock.

Apparently what happened was that the bougie was not passed into the uterus, but forced through the vaginal wall, and there broken off, the fragment working its way up and through the sacro-sciatic foramen into the position in which it was found on operation. Since the attempted abortion patient has given birth to five living and healthy children.

Remarks.—Barwell* recorded a case of attempted abortion in which a gum elastic catheter became impacted in the pelvis for 20 months, and Jones† speaks of a case of retention of splinters of wood in the neighbourhood of the vagina for 16 years. Our patient has established a record for toleration, I should say, by retaining her bougie for 28 years.

HOSPITAL FOR THE INSANE, KENMORE, N.S.W.

A CASE OF HYDATID DISEASE OF THE BREAST.

By C. W. REID, M.B., C.M., Assistant Medical Officer.

B.K., a female aged 54 years, suffering from chronic dementia, and an inmate for a period of 19 years in the hospitals for the insane in this State, was observed on the 19th July, 1901, to have a slight redness, the size of a shilling, above the right nipple. The breast, on inspection, was found to be enlarged, and on palpation, a fluctuating tumour the size of a Tangerine orange, was made out. The axillary glands were not enlarged. Old scars, probably tubercular in origin, were noticeable over the right scapula and left hip-joint with shortening of the corresponding limb; so that the diagnosis pointed either to a tubercular abscess, or a cystic condition of the breast. On inserting a trochar, a small quantity of fluid, opalescent in character, was drawn off. An incision was

then made, about two inches in length, along lower border of the affected breast, and a pair of dressing forceps introduced into the opening. About 6 oz. of fluid was let out, containing numerous daughter cysts and a small quantity of pus, showing that the cyst was already beginning to suppurate. The cyst wall was then removed, and the cavity washed out with a solution of 1-40 carbolic. No drain was inserted, and the incision, which was dusted with iodoform and dressed with iodoform gauze, healed perfectly in a few days, and the breast is now apparently well.

The points of interest in the case are:—

1. The rarity with which the breast is attacked with hydatid disease.
2. Rapidity with which wounds heal in the insane.
3. The period of quiescence. The patient being under observation for 19 years. No source of infection being likely to occur during her stay in hospital.

REVIEWS AND NOTICES OF BOOKS.

THE MEDICINAL PLANTS OF THE PHILIPPINES. By T. H. Pardo de Tavera, M.D. Paris. Translated and revised by Jerome B. Thomas, jr., A.B., M.D., Captain and Assistant Surgeon U.S.V. Philadelphia: P. Blakiston, Son and Co., 1012 Walnut Street.

The author in his preface explains that he was commissioned by His Spanish Majesty's Government to study the medicinal plants of his native country; that he spent two years in accomplishing his task, but that the result has not been equal to his aspirations because of the difficulties of transporting bodies of so perishable a nature to the place where he hoped to subject them to scientific investigation.

Since many of the plants used medicinally in the Archipelago also grow and are employed in countries far beyond its limit, he has included them all in his work; this will render it specially useful to the medical practitioners of the Philippines. There is, however, a considerable amount of space devoted to information gained by intercourse with mountaineers and "curanderos," and since this information is new and concerns some interesting objects, the numbers of those who read the work must be considerably increased, especially in scientific quarters. T.S.D.

ON THE CURE ON THE MORPHIA HABIT WITHOUT SUFFERING. By Oscar Jennings, M.D. Paris, M.R.C.S. Eng. Second edition, revised and enlarged. Price 3s. 6d. London: Baillière, Tindall and Cox, 8 Henrietta Street Strand.

Successful treatment of patients who have become drug habitués is admittedly a matter of extreme difficulty. Whether by any line of treatment short of forcible seclusion in an asylum, and withholding of the favourite drug, permanent success can be obtained may be a matter of difference of opinion, but one cannot read this work without feeling that if the author's method of treatment proves as successful in the hands of others as in his own, then a great step in

*Proceedings Royal Medical and Chirurgical Society, 1874, viii., 280.
†Boston Medical and Surgical Journal, 1886.

advance in the treatment of morphinism has been gained.

The author admits, of course, that sudden withdrawal of the drug and forcible withholding of it may be successful, but the agony which the patients endure by this method of treatment is intense, and if success can be secured without such suffering, so much the better. As a result of his investigations Dr. Jennings concludes that the craving is associated with cardiac depression, gastric hyperacidity, and nervous irritability and in his plan of treatment he takes cognisance of these three factors. He treats the cardiac depression with cardiac tonics, such as digitalis and sparteine; the hyperacidity with teaspoonful doses of bi-carbonate of soda, and the nervous irritability with hot air baths. "But for the cure of the morphia habit something more is necessary. It requires that for a sufficient space of time the patient be protected from the temptation which exists as long as he is not cured of exceeding in morphia, not because there is any really painful craving for it, but on account of the irresistible impulse that prompts even the best intentioned to succumb to its fascination. It requires that during a certain time he so order his life that the decreasing doses of morphia suffice to prevent discomfort, an end that will not be attained if the patient commit any indiscretion in the shape of error of diet or overfatigue." The amount of the drug given hypodermically is gradually diminished, the use of the hypodermic syringe abandoned altogether, and rectal injections of slightly increased doses of morphia are given; these are again gradually reduced until they reach vanishing point, and the patient is, at any rate, for the time being, cured. Needless to say the author strongly condemns the use of cocaine, alcohol, and specially heroin as a means of assistance in the abandonment of the morphia habit. The work contains a number of cases illustrative of special difficulties, of failures and successes, and we can strongly recommend the careful study of it to any medical man who may have such cases to treat.

G.E.R.

ROUGH NOTES ON REMEDIES. By William Murray, M.D., F.R.C.P. Lond., Newcastle-on-Tyne. Fourth edition. London: H. K. Lewis. Price, 4s.

This small work has now reached a fourth edition. The well-known author gives the results of his experience with some of the old remedies, and illustrates his remarks by some striking cases. Some of his results are certainly remarkable; the permanent cure of diabetes by large doses of arsenic, the cure of intestinal obstruction by belladonna, are worthy of careful study. Not the least interesting chapter is one on "Our Mistakes," which is full of practical suggestions, and cannot fail to be of interest to all medical practitioners.

The book is well worth careful reading and annotation.

G.E.R.

THE JOURNAL OF OBSTETRICS AND GYNÆCOLOGY OF THE BRITISH EMPIRE. Edited by Alban H. G. Doran, F.R.C.S., with the aid, in the special departments, of D. Berry Hart, M.D., Frederick William Kidd, M.D., W. J. Sinclair, M.D. London: Baillière, Tindall and Cox. Price, 2s. 6d. net. Annual subscription, 25s., post free.

The present is the first number of the above magazine. It comes forward as a special journal, independent of any society, and, thus giving catholic expression to the ideas of the British and Colonial obstetricians and gynecologists, it undoubtedly supplies a want. It is a welcome, and, coming under such favourable auspices as to aims and management, is certain to be likewise a worthy and useful addition to medical journalism. The original contributions will be the

work of British writers, but a part of each number will be set aside for abstracts of the writings of American and foreign authorities.

Mr. Alban Doran is the editor, and joined with him on the staff are the authoritative names of Berry Hart (Edinburgh), F. W. Kidd (Dublin), W. J. Sinclair (Manchester), as co-editors, as well as a dozen other men of high position as an editorial committee. There is also a representative list of collaborators in various parts of the world.

The present number contains several able articles. The first, by Dr. C. J. Cullingworth, of St. Thomas's Hospital, is an analysis—rather from the standpoint of the naturalist than the surgeon—of 100 cases of fibromyoma of the uterus. The writer is warranted in believing this a fruitful method of study. The too discrepant views of treatment entertained by different surgeons are no doubt due in great measure to our limited knowledge on such points. Dr. Berry Hart contributes a thoughtful article reviewing the state of obstetrics at the beginning of the twentieth century. To him the situation is hopeful for the future, and the retrospect of the past hundred years as one of pride and satisfaction. British names take a high place in the work done, but Dr. Hart points with a generous envy to the yeoman work of deep thinking Germany in this department. All the other contributions are of a high order of merit. The review of current literature is representative and full, not overburdened with detail.

The editors are to be congratulated on this their first production. The *Journal* will be an intellectual feast and a stimulus to all medical men interested in the subjects it treats of. It is well printed in good type, and the illustrative plates are very finely done.

A.W.M.

WATER AND WATER SUPPLIES. By J. C. Thresh, M.D., D.Sc., Medical Officer of Health to the Essex County Council. Third edition; revised and enlarged. London: Rebman, Limited, 1901. Price, 7s. 6d.

This is a third edition of one of the most valuable little works to the sanitarian which have been published. It deals clearly and concisely with a very important subject from every important point of view. Dr. Thresh's work on water supplies is well known to all health officials, and his authority on this subject is almost unquestionable. The chapter on the interpretation of the results of water analysis is a most valuable one. Two useful chapters on the protection of water supplies have been added to this edition. The printing and general get up of the work are excellent.

W.G.A.

THE POCKET FORMULARY FOR THE TREATMENT OF DISEASE IN CHILDREN. By L. Freyberger, M.D. Vienna, M.R.C.P. Lond., and M.R.C.S. Eng., Hon. Physician to the St. Pancras and Northern Dispensary, etc. London: Rebman, Limited, 1901.

This work has reached a third edition, and has been thoroughly revised, and in part re-written. A chapter on the symptoms produced by the common poisons and the treatment appropriate in cases of poisons has been added.

TRAINED MALE NURSE seeks engagement in mental or ordinary medical cases. Has had considerable experience in mental nursing, massage, etc., and is accustomed to travelling with patients to Europe and in the Australasian States. Unexceptional testimonials. References kindly permitted to Drs. F. N. Manning, Jarvie Hood, W. E. Warren, T. S. Dixon.

Address: R. T. O'NEILL, 68 Crown Street, near William St. (Late 17 Leicester St., Sydney.)

THE AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, 20TH MARCH, 1902.

THE MEDICAL PROFESSION AND THE AUSTRALIAN NATIVES' ASSOCIATION.

ONE of the largest and most enthusiastic meetings of the New South Wales Branch of the British Medical Association was held on Friday evening, March 7th, to discuss the question of medical attendance on the members of the Australian Natives' Association. The attack on the A.N.A. at the Congress meeting in Hobart, and the amount of energy recently displayed by the officials of the Association in this State in their endeavours to allure medical men to accept positions as medical officers to their branches, conduced to the large attendance and the amount of enthusiasm displayed. There was no discordant note in the whole meeting; not only city and suburban practitioners, but also some medical men from the country districts were assembled, determined to learn the true state of affairs, and to fight with unanimity this so-called patriotic but in reality medical sweating institution. Some incorrect statements having been made in the daily press and in a circular distributed to the medical profession in this State, the honorary secretary of the Branch took occasion to emphasise the fact that the Council of the Branch opposed this association from its inception as a medical benefit society, not only on the question of a wage limit but on other grounds as well, and the officials of the Australian Natives' Association were informed of this fact.

A perusal of the report of the meeting published in another column will show that this action of the Council in condemning the Australian Natives' Association, has been fully justified, and has the unanimous support of

members of this Branch. We know what the history of this movement has been in Victoria, we know that the profession in that State is groaning under the incubus of this monster and longing to be delivered from it, and the profession in New South Wales, which has become more and more united on questions of medical policy has spoken with no uncertain sound that it will have none of the Australian Natives' Association at any price.

We have no concern with this Association as a political organisation; each may hold his own views upon it from this standpoint, and act as he thinks fit. But loyalty to the best interests of the profession, and to the legitimate Friendly Societies and Orders, which the profession has always recognised as fulfilling an important and useful function for the industrial and wage earning class of the community, has decided us in assuming an attitude of antagonism to any organisation such as the Australian Natives' Association, which seeks to allure members from the ordinary benefit societies by offering them superior advantages such as social prestige, political influence, and the chance of a seat in Parliament with all the emoluments attached to that important office, at the rate of a few pence a week.

The South Australian *Register*, in an editorial article on the recent Congress at Hobart, says: "It is a pity that the excellent tone of the proceedings should have been marred by the repetition in an aggravated form of a stupid attack on the Australian Natives' Association. We have no need to champion this Association, which can take care of itself. . . . It is, however, gratifying (!) to observe that the Congress did not seriously regard the discordant note which was sounded, and probably little more will be heard of it in the future." Our contemporary is a little in error in supposing that the profession in Australia having been aroused by the tactics of the Australian Natives' Association will calmly go to sleep

and allow this Association to pursue the even tenor of its way undisturbed. The action of the New South Wales Branch of the British Medical Association, we hope is but the beginning of a resistance on the part of the profession to the encroachments and assumptions of the Australian Natives' Association, which will not end in New South Wales; and that by the time the next Congress meets in Adelaide the strongholds of this Association in Victoria and the other States will not only be tottering but will have fallen to the ground. This can be secured by united action on the part of the profession throughout the Commonwealth of Australia.

THE INTERCOLONIAL MEDICAL CONGRESS AT HOBART.

THE sixth Intercolonial Medical Congress has come and gone, and left on the minds of those who were privileged to attend it an impression not likely to be soon effaced. The hearty reception and the warmth of the hospitality, not only of the profession, but also of all classes of society has been highly appreciated, and our friends in Adelaide will have to bestir themselves by 1905 if they wish to out-do the welcome and hospitality extended to the members of Congress at Hobart. None but those who have been actually engaged in such work can understand the amount of organisation required to bring such a function to a successful conclusion, and the hearty vote of thanks extended to Dr. Gregory Sprott, the general secretary, has been well deserved, for upon his shoulders has fallen, naturally, the bulk of the work. The work of the President and other officials has also been fully recognised and appreciated.

To turn to the scientific and practical results of the meeting, some important resolutions were passed, it is true, and one cannot gauge the amount of good work done by the character of the papers read, or of the discussions upon

them. One of the most important functions of a congress is to bring men face to face that they may discuss their work, and learn from one another; but such knowledge and mutual inspiration is a thing which cannot always be recorded in the pages of the history of a congress. Still, we regret that more definite and practical results have not been obtained by the meeting. The discussion on cancer we think specially disappointing, but we propose to return to this in a future issue. The resolution brought up from the Section of Public Health on the sanatorium treatment of pulmonary tuberculosis was rejected. Perhaps it would have been unwise to have passed it in the specific form in which it was presented to the general meeting of Congress; but surely some authoritative expression might have been given by Congress as a body on the question of the sanatorium treatment of pulmonary tuberculosis, seeing that this is a matter which has come prominently before the public during the last few years. Another important subject which has been so unfortunately and painfully prominent of late—the bubonic plague—does not appear to have even been discussed. An expression of opinion from a united body of medical men, assembled in Congress, upon the mode of infection, the precautions necessary to prevent its spread, the value of the preventive inoculation, the quarantining of "contacts," are all subjects of burning interest to the public of these States, and yet not a single expression of opinion upon any one of them was given by Congress. It may be argued that there was not sufficient time to discuss these various matters, but surely, the questions concerning the bubonic plague are of much greater urgent importance than a discussion on cancer, from which no immediate practical beneficial result could be anticipated. The plague is a preventible disease; cancer, so far as we know at present, is not, and the Governments and the public of these States look to the profession for guidance and instruction in the methods to be

adopted to prevent the spread of the dreaded disease. Once again Congress was silent so far as any authoritative expression of opinion was concerned upon many questions of medical ethics of urgent importance to the general practitioners of these States at the present time. We sincerely hope the suggestion of the West Australian Branch of the British Medical Association will be acted upon at the next Congress, and that a Section of Ethics will be instituted, for we feel sure it would be largely attended, and probably do much good.

The presidential addresses, in the different sections, which we publish in this issue, were all of distinguished merit, and worthy of the authors and the occasion. Dr. Worrall, in his interesting and instructive address in the Section of Gynæcology and Obstetrics, traced the history of the progress in these subjects in recent years. Dr. Cherry dealt with the origin and spread of typhoid fever, a disease which is very prevalent in Melbourne at the present time. Dr. James Jamieson gave a thoughtful address on the question of the cure of disease by natural means, and Dr. Barnett devoted the attention of his hearers to the progress of surgery in the Victorian era.

THE PROPOSED SCHOOL OF TROPICAL MEDICINE.

ONE of the most important resolutions adopted by Congress related to the foundation of a School of Tropical Medicine. The proposal, we understand, is to establish a school (it is suggested at Brisbane as being the most suitable centre), for the scientific study of tropical diseases, and for affording practitioners who are, or who are likely to be practising in the tropics, an opportunity of becoming practically acquainted with those specific forms of disease which are peculiar to tropical climates. It is proposed to seek the sympathy and help of the Commonwealth Government as well as that of

the Colonial Department of the British Government. We sincerely hope that this proposal will be brought to a successful issue, but this will necessitate careful organisation and the expenditure of a considerable amount of money. Dr. Goldsmith is to be commended for his energy and interest in this matter, and we hope that on his return from England he will have developed a practical scheme for the foundation of this school, and that his efforts will be rewarded by material assistance from the Commonwealth Government, as well from the State Government of Queensland. In the meantime this is a matter to be thought over, and any suggestions on the subject will, no doubt, be welcomed on its assuming a definite shape.

THE MONTH.

The New South Wales Branch of the British Medical Association and the A.N.A.

At a special meeting of the New South Wales Branch of the British Medical Association, held on March 7th, the following resolution was unanimously passed:—

“That this Branch of the British Medical Association having re-considered the question of contract medical attendance on members of the Australian Natives' Association, hereby re-affirms the decision of the Council of the Branch, of August 7th, 1900, in declaring the Australian Natives' Association a society prejudicial to the interests of the medical profession in accordance with the Articles of Association, 35A.”

In accordance with this resolution no member of the New South Wales Branch of the British Medical Association can take the position of medical officer to any branch of the Australian Natives' Association, and any medical man who takes such a position will not be met in consultation by any member of the New South Wales Branch of the British Medical Association.

All the members of the profession in Newcastle and suburban districts have unanimously pledged themselves to have nothing whatever to do with the Australian Natives' Association.

At a meeting of the profession, at Parramatta, at which every medical man in Parramatta, Granville and Auburn, was represented, a resolution was unanimously passed, supporting the recent action of the New South Wales Branch of the British Medical Association in opposing the Australian Natives' Association.

The Thin End of the Wedge.

In one of the suburbs of Sydney, in which the Australian Natives' Association have been trying in vain to secure a medical officer, a member of this organisation consulted one of the local medical men, informed him that he was a member of the Australian Natives' Association, and that the Board of Directors of that Association would pay the fee. We hope that no medical man will have any such dealings with the Board of Directors, but look to the patient himself alone for the payment of the fee.

Admission of Patients to the Sydney Hospital.

The following abstract from the annual report of the Directors of the Sydney Hospital, deals with the abolition of payment by patients:—"One of the most important steps taken for many years was decided upon last November in regard to 'paying patients.' It has been apparent that the system of receiving payment from patients in partial satisfaction of the cost of their maintenance has given rise to many misunderstandings with both the public and the patients; also, unscrupulous persons have frequently endeavoured, under the cloak of assumed poverty, to obtain all the benefits of the hospital at a cost of a few shillings per week. It appeared to the Board, too, that the practice of sending the destitute sick and feeble to the Government for a pauper order of admission was subjecting them to unnecessary delay and humiliation. Accordingly, the board decided upon taking the drastic step of abolishing the system of receiving 'paying patients,' and to admit all deserving cases, so far as the accommodation of the hospital will permit, without stipulation for payment, and without referring them to the Government for the pauper order, stringent precautions being taken to prevent abuse of the charity. In order to do this, an arrangement has been verbally made with the Government satisfactory to both sides, under which the hospital receives from the Government the same amount as has hitherto been paid for the maintenance of Government patients.

Leprosy in New South Wales.

THE report of the President of the Board of Health on leprosy in New South Wales for the year 1900 has just been published. From it we learn that on 1st January, 1900, thirteen persons remained under detention at the lazaret. During the year but one person, a Chinese, was admitted to the lazaret under warrants, after careful inquiry into his case. Three patients died during the year; all were natives of New South Wales, and of European descent. Thus the number remaining in the lazaret on 31st December, 1900, was eleven persons; five were natives of New South Wales of European descent, one was a European native of Fiji, and one was a native of the United States of America, one was a Javanese, one an aboriginal of Tanna, and two natives of China. The total number of persons admitted since 1883, when patients first began to be received (though the notification of leprosy was first made compulsory, and the detention of lepers provided for by law only towards the end of 1890), is 69. Every opportunity is given to members of the medical profession to visit the lazaret for the purpose of seeing such patients as were formerly under their care, and for study of the disease. The cost of maintenance of the lazaret has been £154 0s. 3d. per inmate per annum. We are glad to learn that one inmate, a case of stationary nerve leprosy, with no open sores, has been released during the year from the lazaret, on condition that he presents himself from time to time for medical examination.

The Brisbane Ambulance Brigade.

APROPPOS of the comment upon the action of this organisation by Hon. Dr. Taylor in his recent presidential address to the Queensland Branch of the British Medical Association, the following editorial, which appeared in the *Brisbane Telegraph*, of February 7th, is of some interest:—

"But we must spare a few minutes from the treadmill of this busy life to congratulate the Brigade on its last year's work and record. Though members work on without looking for any special recognition, it is only gracious to show them that when the opportunity arises there is no stint in the expressions of praise to which they are justly entitled. That the public man heartily appreciates its work may be seen from the contributions which are sent in. We are assured that the appreciation will never weaken, and that the Brigade, as time goes on, will continue to strengthen its hold on the public estimation."

INTERCOLONIAL MEDICAL CONGRESS, SIXTH SESSION, HOBART, 1902.

FIRST GENERAL MEETING.

THE sixth session of the Intercolonial Medical Congress of Australasia was opened in the Town Hall, Hobart, on Monday, February 17th.

At 11 o'clock the members took their seats, and the first business of the Congress was taken.

The retiring President, Dr. John Thomson, of Brisbane, took the chair, supported on the platform by Dr. Gregory Sprott, of Hobart, the general hon. secretary; Dr. J. E. Wolfhagen (Hobart), hon. treasurer to the Congress; Dr. J. Cooke Verco (Adelaide), and Dr. Sydney Jones (Sydney), past presidents of Congress.

The CHAIRMAN said that about two and a half years ago—in September, 1899—it was his privilege, at the Congress in Brisbane, to congratulate the members on the selection of the president. The lot fell upon Richard S. Bright, and he still recollected the strong and hearty applause with which the name was received. He—and, no doubt, a great many others of those present—had looked forward to this meeting to continue the friendship so pleasantly begun in the Northern capital. But it was not to be. His esteemed friends present would pardon him if he said that that meeting had been shorn of one of its attractions in the loss of their friend, Dr. Bright. He passed away quietly and painlessly on an October morning. He was held in universal respect by the community, and esteemed by his professional brethren. He died in the fulness of years—but not a very old man—in harness; and what more could a man desire? The executive committee had appointed the Hon. Dr. Gamaliel H. Butler, M.L.C., to the chair. Of course, that appointment had to be new confirmed by the Congress. That was why, for a few seconds, he (Dr. Thomson) occupied that position. The Secretary said there was a little work to be done that morning—the report of the Executive Committee was to be brought up.

EXECUTIVE REPORT.

Dr. G. SPROTT (Tas.) then read the following report of the Executive Committee:—

At the close of the Brisbane meeting, it was decided that the sixth session of Congress should be held in Hobart, and Dr. R. S. Bright was unanimously elected president. As early as June 6th, 1900, the president called upon the members of the medical section of the Royal Society in Hobart, and those of the Launceston branch of the British Medical Association, to initiate the work of Congress, and at this meeting an executive committee was appointed, with Dr. G. H. Butler as hon. treasurer, and Dr. G. Sprott as hon. secretary. The following gentlemen consented to act as local secretaries:—South Australia: Mr. J. B. Gunson, M.B. Victoria: Mr. G. Adlington Syme, M.B., F.R.C.S., Eng. New South Wales: Mr. Philip E. Musket, L.R.C.P., and S. Edin. New Zealand: Professor John H. Scott, M.D., Edin. West Australia: Mr. Athelstan J. H. Shaw, M.D., Camb. Queensland: Mr. Wilton Love, M.B., Edin. The duties falling to these gentlemen have been carried out in a most energetic and satisfactory manner, and the committee desired to record their hearty appreciation of the services rendered by them.

As this was the first meeting since the inauguration of the Australian Commonwealth it was decided to ask the Governor-General to become the patron of the Congress, a request to which he graciously acceded.

Following the custom of previous congresses, it was decided to ask the Hon. the Premier of Tasmania to invite Government delegates from the other States, and the following gentlemen were appointed by their respective Governments: Dr. John Thomson, Queensland; Dr. W. G. Armstrong, New South Wales; Dr. T. Cherry, Victoria; Dr. W. T. Hayward, South Australia; Dr. T. H. Lovegrove, Western Australia; Dr. J. M. Mason, New Zealand; Dr. G. Sprott, Tasmania.

As the work of the Public Health section promised to be both arduous and interesting, the Mayors of capital cities, and the President of the Metropolitan Board of Water Supply and Sewerage, Sydney, were asked to send their medical advisers to take part in the discussions, the Melbourne City Council being represented by Dr. James Jamieson, and the Sydney Metropolitan Board of Water Supply and Sewerage by Dr. T. M. Kendall.

The committee desire to record their appreciation of the great assistance they have received from the Tasmanian Government and from the railway authorities of the other States and New Zealand in allowing considerable concessions as regards railway fares. The various steamship companies have also rendered assistance in this way.

The only work handed over by the Brisbane Congress was that relating to the formation of a board of medical officers as an advisory body in connection with the Army Medical Corps, and also a resolution with regard to the abuse of charitable institutions.

As these resolutions have been brought under the notice of their respective Governments by their delegates to the Brisbane Congress, it was not thought advisable by this committee to take further steps in the matter.

The committee have also to report that, acting according to the resolution moved by Dr. Worrall at a special afternoon meeting, held at the Brisbane Congress, a Medical Defence Association has been formed in Tasmania, Queensland, and West Australia.

As regards the work in connection with this Congress, there are the usual six sections. The subject for general discussion is that of cancer, and numerous papers have been promised. The committee wish specially to acknowledge the splendid services rendered by Professor H. B. Allen, of Melbourne, who will open this discussion.

Various suggestions have been made—one by the West Australian Branch of the British Medical Association—with regard to the establishment of a section for medical ethics and politics, unfortunately came too late to be acted upon, but the matter may be brought forward at the general meeting of Congress.

The change of name of the Intercolonial Medical Congress to one indicated by the new order of things as regards colonies has been discussed, but it was felt by the committee to be a matter for decision by the general meeting of Congress. An opportunity will be given members to discuss this matter at a future meeting.

Almost at the completion of the committee's preparatory work, the sudden and much-regretted death of the president-elect deprived the committee of its most enthusiastic and energetic worker—one who had carried on the work to the day of his death.

At a subsequent meeting the Hon. Dr. G. H. Butler was elected as acting president, and the members of Congress will now be asked to endorse the choice of the committee. As by the election of the Hon. Dr. Butler, a vacancy was created in the treasurer'ship, Dr. J. E. Wolfhagen was elected as hon. treasurer.

Yet another worker, Dr. J. G. Johnson, of Evandale, who was acting as joint secretary in the section for midwifery and gynaecology, was removed by the hand of death, after he had rendered valuable service in the organisation of that section. His death is much regretted.

Appended is a balance-sheet, as forwarded by Dr. Wilton Love, of Brisbane, which the treasurer will now read.

BALANCE SHEET.

Dr. WOLFHAGEN (Tas.) the treasurer, read the following balance-sheet:—To balance from Congress of 1896, £54 3. 11d.; members' subscriptions (354 at 21s.), £371 14s.; exchange remitted, £3 4s. 9d.—£429 2s. 8d. Sundry payments as per accounts, £313 19s. 2d.; exchange on New Zealand draft, 5s. 7d.; exchange paid on cheques, £2 11s. 9d.; bank charges, £1 10s.; balance in bank, £110 16s. 2d.—£429 2s. 8d.

Dr. WOLFHAGEN added that the treasurer of the Brisbane Congress had handed over a sum of £109, which would go to the credit of this Congress.

The CHAIRMAN moved that the report and balance-sheet be adopted.

Dr. VEROO (S.A.) seconded the motion, which was passed with applause.

THE NEW PRESIDENT.

Dr. THOMSON then announced that the Hon. Dr. Butler had been appointed President of the Congress, and vacated the chair in his favor.

The PRESIDENT, who, on taking the presidential chair, was greeted with loud applause, said—Gentlemen, for the great honour you have conferred on me I cannot express the gratitude I feel. I cannot say unreservedly that I take the chair with pleasure—the circumstances so feelingly explained by Dr. Thomson prevent any expression of pleasure. Dr. Thomson has said that he and his brother visitors miss the one who should have been in the chair. Much as you miss him, your feeling is infinitesimal, compared with the loss of us, who knew him best, and worked with him, for he had completely won our hearts. He was a man we all looked up to as our guide, philosopher, and friend—he was so regarded by the whole of the profession in Tasmania. There was no medical man in this State more beloved than Dr. Bright, our late president. Had he been here, he would have been of great service to Congress, not only in the work, but also in the pleasure portions of the meetings. I will not anticipate anything I may have to say to-night, especially as to-day's meeting is more of a preliminary canter to get the medical men together, and the work in order. I again thank you, and trust I will be able to carry out the presidential duties successfully.

CONDOLENCE WITH MRS. BRIGHT.

Dr. TODD (Adelaide) said it was his privilege to move that a vote of condolence be passed with Mrs. R. S. Bright, on the death of their late president.

Dr. THOMSON (Brisbane) said he could not say he had pleasure in seconding the resolution, but it gave him much satisfaction to do so.

The resolution was carried in silence, all up-standing.

SIGHT TESTS FOR RAILWAY EMPLOYEES.

The PRESIDENT, having announced that any member could bring forward any matter deemed of general interest, and not in the programme.

Dr. MURRAY (Melbourne) said he considered that the present method of sight testing employed in the railway departments of New South Wales and Victoria was quite inadequate. He moved:—“(1) That all employees on railway lines, or in any way connected

with railway traffic, should be examined periodically by medical men skilled in eye work; (2) that the so-called practical test in use in New South Wales and Victoria be abolished, as it is unscientific and inaccurate; (3) that all candidates for railway service should be examined with a view to their permanent fitness.

The motion was referred to the Section of Diseases of Eye, Ear, Throat, to consider and report.

COMMONWEALTH ARMY OFFICERS.

Dr. SYDNEY JONES (Sydney) said there was one subject that he thought should be considered by the Congress, as it was of interest to every medical man throughout the Commonwealth. He referred to the proposal to transfer Col. Dr. Williams from the Army Medical Corps in New South Wales to a more important position under the Commonwealth Government at a reduced salary. Colonel Williams had been appointed Director-General of the Army Medical Service of the Commonwealth. That was very satisfactory, but the unsatisfactory part of it was that whilst Colonel Williams had a salary of £900 whilst in the service of New South Wales, his salary under the Commonwealth would be reduced to £850. Whilst the services were increased, and position improved, the salary was reduced. This would entail a corresponding decrease in the salary of every medical man in the service, not alone under the Commonwealth, but also in the States, and he (Dr. Jones) regarded it as another step in the direction of cutting down the remuneration of the medical profession—a process that had been in operation for some time, and against which they should take a stand, for the result would be the employment in the service of men of less efficiency and less education. He moved that the following committee be appointed to consider the subject, and to report thereon to Congress, with the object of making representation to the proper authorities:—The President, Professor Allen, Drs. Watson, Wyld, and the mover.

Professor ALLEN (Melbourne) agreed that it was desirable for adequate remuneration to be paid to the Director-General. Colonel Williams had received a flattering invitation from the Imperial Government to resume duty in South Africa, with extensive powers, but he had been called upon by the Commandant of Australia to undertake the re-organization of the Australasian Medical Service. Under these circumstances Colonel Williams was entitled to adequate remuneration for his services.

Dr. WOODWARD (Sydney) seconded the motion.

After further discussion, the name of Dr. J. G. Hamilton, of Adelaide, was substituted for that of Dr. Thomson, and the motion was agreed to.

The meeting for transacting general business then adjourned till Saturday morning.

PUBLIC OPENING OF THE CONGRESS.

IN the Town Hall, Hobart, on the evening of Monday, February 17th, there was a public meeting to celebrate the opening of the Congress. His Excellency the Governor, Sir Arthur Havelock, presided, being accompanied by Lady Havelock and suite. There were on the platform with His Excellency:—The President of the Congress (Hon. Dr. Butler, M.L.C.), Sir John Dodds, Chief Justice, the Mayor of Hobart (Alderman Kerr), the Premier (Hon. N. E. Lewis, C.M.G.), The Chief Secretary (Hon. G. T. Collins), President of the Legislative Council (Hon. Adye

Douglas), Speaker of the House of Assembly (Hon. N. J. Brown), Mr. Justice McIntyre, the following past presidents of Congress:—Drs. Verco, S.A.; Sydney Jones, N.S.W.; and Thomson, Q.; the following representatives of State Governments:—Drs. Hayward, Adelaide; Cherry, Victoria; Mason, New Zealand; Lovegrove, West Australia; Sprott (General Secretary), Tasmania; and Professor Allen, Melbourne.

HIS EXCELLENCY, who was received with loud applause, said:—"Mr. President, ladies and gentlemen, it was hoped that His Excellency the Governor-General, who is patron of the Intercolonial Medical Congress, would have been able to open this Session, and an invitation was sent to him, asking His Excellency to do so. His Excellency expressed his regret that he was prevented from availing himself of the invitation, as he was unable to leave Melbourne at the time fixed for opening the Congress. The Governor-General, at the same time, heartily concurred with the suggestion made by the Committee, that, in case he should be unable to be present, the Governor of Tasmania should be asked to open the Congress. It is with great pleasure that I have acceded to the wish of the President and Committee that I should fill this honourable position in the proceedings of this Session, and I feel proud to be the representative of His Excellency the Governor-General in this important and interesting ceremony. I have pleasure in offering a hearty welcome to the gentlemen who have assembled here from all parts of Australia, to be present at this Congress. I am persuaded that the deliberations of Congress will result in the advancement of science, and I trust that those members of this noble profession, who are now our visitors, will derive pleasure as well as advantage from their sojourn in Tasmania. Mr. President, ladies and gentlemen, I declare this Session of the Medical Congress to be duly opened."

THE PREMIER (Hon. N. E. LEWIS), said:—"Your Excellency, Mr. President, ladies and gentlemen, on behalf of the Government, and the people of Tasmania, I desire to tender to the members of the Intercolonial Medical Congress a hearty and cordial welcome to Tasmania on this, their first, visit to our shores. We deeply regret that the President-elect (the late Dr. Bright) has been called to his rest. In his successor (Dr. Butler), you will have a worthy successor. He has endeared himself to us by his many qualities—by his professional status, by his interest in our social, sporting, and political life; and he has that geniality and at the same time that power, to command, which will, I am sure, fit him to preside worthily over such an august assembly as the congress now declared open by His Excellency. We hope that the visitors will also enjoy some pleasure during their visit. We regard Tasmania not only as a pleasure resort, but also as a health resort—and I trust that one of the results of this congress will be that the professional men of the mainland will prescribe for their patients at least one trip to Tasmania. I hope that this congress will afford not only profit, but also pleasure, to everyone connected with it."

HIS WORSHIP the MAYOR then read an address of welcome.

THE PRESIDENT said:—"While extending to our visitors a hearty welcome to Tasmania, I must express my gratitude to the members of the Congress for the great honour done me by electing me to preside over this distinguished gathering. Nevertheless, I take the presidential chair with the utmost regret, owing to the circumstances which have made it necessary to elect a new president. A little over two years ago, at the Brisbane meeting, the late Dr. Bright invited you to

hold the next session of Congress at Hobart, and the members assembled unanimously elected him president. From that time till the day of his death he was a most ardent and zealous worker in all Congress matters. His death has been keenly felt by the Executive Committee during the last two months, when they most needed his general knowledge and experience to guide them. It is, indeed, but little to say, that he had entered into the work of Congress determined that no effort on his part should be wanting to make this meeting a great success. Not only as President of Congress, but in every way, do we, in Hobart miss him. He was an experienced and respected practitioner, whose advice and assistance were frequently sought by younger practitioners, who ever found him willing to assist them with the knowledge he had gained by his long experience and successful career.

It is fitting also here to refer to a death which recently took place in Hobart—that of one of the vice-patrons, Sir James Agnew, M.D., K.C.M.G. Although unable to take an active part in the work of Congress, he was much concerned for its interest and welfare, and we were all hopeful he might have been spared to have been with us this week. Within the last few weeks death has removed one of our sectional secretaries, in the person of Dr. J. G. Johnson, of Evandale. He was one of those who attended the first meeting held to consider the work the Congress might do in Tasmania. From that time until failing health prevented, he took an active part in the work of the Midwifery and Gynaecological Section. In addition to being an energetic and active worker, he was of a genial disposition which rendered him a great favourite among his professional brethren.

There are others whom we shall miss from this meeting: our esteemed Vice-president, Dr. Willis Way, who was well known to most of us, and whose sudden death we all deplore; also others less known, whose memories will ever remain with us. I refer especially to those who lost their lives in the Empire's cause during the present South African war. We know how the services of the Australian and New Zealand Army Medical Corps were appreciated by the home authorities, and it is gratifying indeed that in our profession there was no lack of volunteers for this work. We sympathise with those who mourn for the loss of a loved one, and give a hearty welcome to those who have returned to their homes, some of whom are with us to-night crowned with distinction and honour.

When we turn to the work of Congress, it is perhaps to be regretted that the usual inaugural address could not be given. The late President had to a large extent prepared his address, but the time since his death was altogether too short for me to prepare one worthy of this great occasion. While presidential addresses are sometimes lengthy, and may even be tedious, they are nevertheless instructive. I hope the present omission will in no way establish a precedent.

I think, however, that the work to be done in the Sections, together with the general discussion on cancer, will occupy our full time. From the promises given of papers there will be enough to do in sectional work, and the volume of information supplied to us by Professor H. B. Allen in his opening remarks on cancer will require our most earnest and serious consideration. It was very gratifying to the Committee to know that after the subject of cancer had been selected for general discussion, among the first wishes expressed by his Majesty the King was that scientists should strenuously endeavour to discover the cause and cure of cancer. It is not anticipated that any very definite conclusions will be arrived at during this discussion, but it is hoped

that sufficient interest will be aroused among members of the profession to ensure further scientific investigation in this very important subject, and that good ground-work will be done which will form a solid basis for further scientific inquiries. It has been suggested that an Investigation Committee might be formed at the close of the discussion. The suggestion is a good one, and might well be acted upon.

And here I would urge one word of caution, and that is, that Congress should not be hasty in arriving at any conclusions unless they are proved scientifically correct. There is no doubt that the work of such a Congress as this largely influences public opinion, and that being so it should be able to bear the most severe criticism.

There are many subjects besides cancer on which an expression of opinion would be very desirable. I refer more particularly to the open-air treatment of consumption, and the responsibilities of the States to provide sanatoria for the treatment of this disease. It is practically settled that the treatment of consumption must be to some extent a national movement, but as to how this can be best carried out is still a matter for consideration. With Federal Australia we can reasonably hope to have in the near future a Federal Health Department with uniform laws relating not only to quarantine, but to other matters appertaining to the public health. There is, for instance, the much-vexed question of compulsory vaccination. While we have in one State a law for compulsory vaccination rigidly carried out, in many of the other States it is either indifferently complied with, or not carried out at all. It is much to be desired that the Central Health Department should urge the various States to adopt a uniform system of vaccination to protect the public against small-pox, rather than rely upon the present system of quarantine; for most assuredly, the time is not far distant when it will be found that that system in itself is insufficient to prevent the introduction of small-pox into a colony in which there are so many unvaccinated people as there are in this State.

The need of a section where matters such as the one under review could be discussed no doubt prompted the members of the British Medical Association of Western Australia to move that a section be formed for the discussion of medical politics and ethics. This suggestion arrived too late for such a section to be arranged for at this meeting, but inasmuch as it appears to be an excellent one, I hope that the Committee of the next Congress will not overlook it. We know that politicians enact laws the full significance of which they are not always fully cognisant of at the time. Take, for instance, the "Compulsory Notification of Infectious Diseases." We find that in some of the States a reasonable fee is paid; but in our own, medical men are compelled to report all cases without fee or reward, and are under a heavy penalty if they neglect to do so within 24 hours.

The ethics of the profession is a branch in our training as medical men very sadly neglected in the universities and medical schools of the present day. I believe that many of the "laches" of some practitioners are due to want of knowledge rather than wilful disregard of professional courtesy. A section in which the difficulties one encounters in routine and general work could be discussed would prove a very useful one, for it must be admitted there is a tendency in the present day to overlook many of the old and desirable rules which have hitherto guided medical men in their professional dealings with one another.

These, gentlemen, are some of the subjects which may be dealt with by this Congress.

There is also a matter of great importance which must be considered during this week, and that is the advisability of changing the name of the Congress and altering the constitution of the Council. Immediately after the inauguration of the Commonwealth the Committee considered the desirability of altering the name "intercolonial," which seemed to be somewhat of a misnomer under present conditions. The Committee came to the conclusion, however, that they had no power to alter the name, even if it was thought desirable to do so. They therefore decided to invite discussion as to what would be a more suitable name to bestow on this important association.

It would also be advisable to consider whether the Congress could not be more satisfactorily carried out by the appointment of a permanent committee with representatives in each State or colony. At a later meeting an opportunity will be given you of saying whether any alteration should take place, and, if so, in what direction. A motion will be moved for the formation of an Australasian Medical Association, or Congress, which will give members an opportunity of ventilating their opinions, and it is hoped that after considering the matters from every aspect some definite and suitable arrangement will be arrived at.

It is now my very pleasing duty, on behalf of Tasmanian members, to welcome you to our State. I hope you will all thoroughly enjoy your visit to our island, and trust that its natural beauties and the genuine and hearty welcome which its people extend to you will make it as enjoyable as it is likely to be profitable. This wish will be fully realised, I am sure, if we are exempt from those atmospheric disturbances which our friend, Mr. Wragge, usually favours us with when they are least desired. Our professional community is very small, and I am sure you do not expect great things from us. I know it was rather bold of us to invite you here, but we feel sure that the resources of medical men to find enjoyment wherever they are placed will help to carry us through. We trust that you will all return to your homes benefited in health, and with kindly remembrances of having spent a pleasant week.

On behalf of the profession I welcome you to Tasmania.

The retiring President (Dr. Jno. Thomson, of Brisbane), moved a hearty vote of thanks to His Excellency for not only coming to the meeting, and taking the chair, but also for his kindly words and practical sympathy with the Congress.

The motion was passed with enthusiastic applause.

Professor Allen moved a hearty vote of thanks to the Premier and the Mayor of Hobart for their kind words of welcome.

The proceedings then terminated.

THE PROPOSED AUSTRALASIAN MEDICAL ASSOCIATION.

At the meeting of the Congress on Friday evening, February 21st, Dr. McCALL, M.H.A. (Tasmania), moved—"That, in the opinion of this Congress, the time has arrived when it will be in the best interests of the medical profession to establish an Australasian Medical Association." He understood that whilst some members of the profession were in favour of this, others were opposed, unless such an association would include medical defence; others, again, were opposed out of a feeling of loyalty to the British Medical Association; but, still he thought they would recognise that the time had arrived when an Australasian Association

should be formed, retaining affiliation with the British Medical Association as a final court of appeal. With their own association within the borders of the Commonwealth, its Council would have a better knowledge of local conditions, and its decisions would have great weight with the British Medical Association on appeal. It was generally admitted that there had been one case remitted to London, where the British Medical Association did not act in a manner that was best; an Australian Association would have been better able to judge the case. The meetings of such an association, if formed, would take the place of these congress meetings; they would have their own journal, which would voice the desires of the whole Australian profession, and would be distributed within a reasonable time after publication. Such an association would wield a great influence towards having uniform legislation with respect to the profession in the States. There were taxes imposed on the profession that required the strongest resistance. An association, with its journal, would help them. Such abuses as the system of electing medical officers to the Melbourne Hospital might be put an end to. He condemned the practice of persons of wealth combining to sweat the profession by means of the benefit societies. He did not allude to the poorer classes, for whom such societies were really meant, but he condemned the richer persons, who were well able to pay proper medical fees, combining, through such societies, to deprive the professional men of their proper remuneration. The formation of the society he advocated would tend to secure general legislation on this, as well as on other subjects, for the benefit and advancement of the profession in Australasia.

Dr. G. A. SYME (Melbourne) seconded the resolution.

On the motion of Professor ALLEN, the debate was adjourned till next day.

The meeting then terminated.

On Saturday morning the discussion was resumed of Dr. McCall's motion of the previous evening.

Dr. RALPH WORRELL (Sydney) proposed, as an amendment,—"That the name of the Congress shall in future be 'The Australasian Medical Congress,' and that each State, including the colony of New Zealand, shall have as representatives of the Congress the hon. secretary of the Branch of the British Medical Association in each State." He claimed that in that way they would have a loose connection between the Australasian Medical Congress and the profession in each State. Such representatives would be in closer touch with the profession in Australasia. At present it was not so; they seldom heard of their representative. He did not believe there ever was a time when so many hostile forces surrounded the profession in these States as at present. Therefore, their only hope lay in union. In New South Wales they had complete union, whilst in Victoria they had the least union. In Queensland, two years ago, there was no union at all, mainly because there were two societies, the Queensland Medical Society, which had as members the majority of the profession, together with a large amount of property, and there was the local Branch of the British Medical Association. The Queensland Medical Association gave up their property to the local Branch of the British Medical Association, and joined it *en masse*. The consequence was, that the profession in Queensland was now better organised than ever. Victoria was the one weak State as to organisation in their ranks in Australasia, and it was due, firstly, to their being two medical societies in that State, instead of one good, firm organisation. Then they had a Victorian medical

journal, almost exclusively taken by the Victorian medical men, whereas all the other States were well represented by the *Australasian Medical Gazette*, admirably conducted, the only weakness connected with it being that it required some support from the profession in Victoria. They should support it, and give up their own journal. How much easier it would be for the Victorians to join the organisation existing throughout the other States, as one united body, than for the other States to give up their own organisation, formed with infinite trouble, in order to join the Victorian organisation? One speaker had referred in terms of praise to the Australian Natives' Association; but they looked upon the Australian Natives' Association as the greatest enemy of the profession. In the first place, it was not a legitimate medical benefit society. It was the enemy of the legitimate medical benefit societies, in so much as it sought to allure their members by offering them the bait of a "higher tone society" and "political power." Legitimate friendly societies were formed by men mainly of the industrial classes joining together when in health for mutual support when ill; but with the Australian Natives' Association its medical benefits were a secondary matter altogether, existing for the purpose of taking into its ranks men of all classes and means, and diminishing the practice available for the legitimate profession. The Australian Natives' Association was also an illegitimate force in politics; it was an organisation that sought to control the politics of the country for the benefit of a section of the population. America had not become the great nation she is by dividing into sections the peoples of various European nationalities who came to her shores, and making a distinction in favour of any particular section of the settled population, such as the Australian Natives' Association strove to do. The Australian Natives' Association sought to obtain undue privileges and advantages for itself, and he maintained that it was a mischievous force in the community. It was an organisation which aimed at substituting intrigue and chicanery for true merit and sterling work. It was a power behind Ministers, like Tammany-hall in New York, where the Mayor was not the power, but the head of the "Tammany-hall" organisation. The Australian Natives' Association was poking its nose into everything, and seeking to speak for the community in general in every movement that took place, and he held that every member of the profession who countenanced the position of medical officer to that society helped to enslave the profession. For those reasons he moved the amendment, and trusted that no new association would be formed, the effect of which could be only to weaken and disintegrate the profession and form an unhealthy rivalry with the British Medical Association.

Dr. HANKINS (Sydney) seconded. As the representative of the British Medical Association Branch in New South Wales, he could say that they were there a very united body. They were now more united than they had ever been before. With regard to the Australian Natives' Association, he might say that at its very inception in New South Wales, he took the opportunity of interviewing the General Secretary of it, to ascertain whether they fixed any wage limit, or whether any member of it would be open to receive medical benefits, and got the answer that the Australian Natives' Association could not entertain the wage limit for one moment. He then at once called a meeting of his Council, when it was decided that any member who took office in the Australian Natives' Association would be ostracised. This had the effect of hampering

the Australian Natives' Association's position, till they at last approached the Council, and expressed their willingness to accept a £200 limit, because they were not able, under any circumstances, to get medical men. He did not think they got more than two in the whole colony. There was to be a meeting of the British Medical Association to decide whether they should accept the Australian Natives' Association on any terms, and he sincerely hoped the decision of the British Medical Association branch in New South Wales would be dead against it—for he felt that if they entered into relations with them, the Australian Natives' Association would have their heels upon the necks of members of the profession, and have them in their power. There was no reason why the Australian Natives' Association should seek to establish medical benefits under the friendly societies' system. If their members wanted such benefits they could go into the clubs. There was no reason why the profession should give into them at all. It was much better not to have any contract arrangements with them in any shape or form. It seemed at present in Victoria, to be almost hopeless to bring about a better state of things in the interests of the profession, the Australian Natives' Association having got such a strong footing there that some of the medical men were unable to freely speak their minds, openly, in the matter. The new Association proposed in Dr. McCall's motion would be regarded in New South Wales as very undesirable. No doubt, federal unity, and having business relations in common, with power to govern themselves would be advantageous, and the other day representation was made to the British Medical Association stipulating for autonomy, and no doubt it would be granted. It would be unwise to talk of forming any new organisation unless that request was refused. He thought they would agree that what was wanted was a combination of the different societies.

Professor H. B. ALLEN (Melbourne) pointed out that the Medical Society of Victoria was by far the most important in that State. There the British Medical Association had not had the free and easy development that it had had in other States. Recent events had so evolved that the British Medical Association was now comparatively feeble in Victoria, while the other was a strong and healthy society. It would be a policy of doubtful wisdom to put pressure upon the profession in Victoria to alter its society arrangements. One fact would show the strength of that argument. Over and over again the Medical Society had made attempts to bring about an amalgamation with the local branch of the British Medical Association, but the attempt had always been defeated by the branch. It appeared that two or three members of the Medical Society had made one or two injudicious remarks. If this congress now said that it was to be represented by the branch, not by the Medical Society, it would do grievous harm. Let them take the first part of the resolution altering the title of the congress, and the president of the next congress be asked to make inquiries and arrangements for the State business of the congress. This, if found satisfactory, could be affirmed or changed by the next congress.

Dr. W. MACANSH (Brighton, Victoria), said he stood there as the representative of the British Medical Association. Under careful managing and nursing it had gone on the increase, and it was the first time he was aware that there had been any actual proposal at all for union of the two societies under the British Medical Association. The subject of amalgamation had been discussed in the council of the Victorian Branch of the British Medical Association, and it was

quite possible for the two societies to come to some terms.

Dr. E. HINCHCLIFFE (Bendigo, Victoria), said he was president of the Medical Society of Victoria in 1891 when amalgamation was proposed. There were then 300 members of the Medical Society, and 20 members of the British Medical Association and the terms offered by the branch of the British Medical Association were such that the Medical Society could not see its way to accept them, and by a unanimous vote they were declined. It was felt that amalgamation would destroy the work of the Medical Society of Victoria. With respect to the lodge system, they went very far in that direction at Bendigo. Bankers, lawyers, parsons, mine managers belonged to lodges.

The PRESIDENT hoped that the differences of the Victorian societies would not be discussed in the congress.

Dr. R. WORRALL (Sydney) suggested that the resolution might be amended by excepting Victoria and Tasmania, and making the local secretaries elsewhere the representatives of the congress.

Dr. J. C. VERCO (Adelaide) moved as a further amendment:—"That the name of the congress be altered from 'The Intercolonial Medical Congress of Australasia' to 'The Australasian Medical Congress.'" He said it was not desirable for them to discuss the policy of the Australian Natives' Association, or the relations of the two medical societies in Victoria. The proposition, too, would not apply to Tasmania. Then there was the question of the local secretaries. It was questionable that the secretary of the British Medical Society could represent the congress. He might not be a desirable man. The congress only met every three years, and the society secretaries were elected annually, so that the representative of the congress might be changed three times in the three years, and perhaps just before the congress sat. He thought the matter ought to be left in the hands of the executive of the congress in the State in which it was to be held.

Dr. W. T. HAYWARD (Adelaide) seconded Dr. Verco's amendment, which was put and carried.

CONCLUDING GENERAL MEETING.

The final general meeting of Congress was held on Saturday, February 22nd. The PRESIDENT took the chair at 10 a.m. The discussion on the proposed Australasian Medical Association was concluded, and it was agreed that the Congress should in future be designated "The Australasian Medical Congress."

Professor H. B. ALLEN (Melbourne) (for Dr. Sydney Jones, of Sydney), brought up the following report of the committee appointed at the first general meeting of Congress, to consider the position of the Director-General of the Federal Army Medical Service:—"That the Intercolonial Medical Congress of Australasia now assembled desires to represent to the Honourable the Minister of Defence the great importance of the organization, on Federal lines, of the Army Medical Department of the Commonwealth. The head of that department must undertake very great responsibility, and the Congress gladly learns that Colonel Williams, C.B., who has rendered such excellent service, both in Australia and South Africa, has been named as the chief administrator. But the Congress entertains a strong opinion that the salary proposed is quite inadequate, and should be raised so substantially that the Director-General of the Army Medical Service of the Commonwealth may devote himself, without fear of financial embarrassment, to the duties of his high office; and that at all times the Commonwealth service may

obtain the guidance and oversight of the most able and experienced officer available. The Congress is convinced that any failure in properly establishing the position of the Director-General will entail risk to the efficiency of the entire Federal Medical Service."

The report was adopted.

School of Tropical Medicine.—Dr. A. H. CLARKE (Hobart) brought up a report from the Medicine Section on the subject of the establishment of a School of Tropical Medicine. Dr. Clarke explained that Dr. Goldsmith was going to London, and the Section thought they would take advantage of this to bring the subject matter of the report before the proper authorities.

The report was adopted.

Public Health Section.—Dr. CHERRY (Melbourne) brought up the following resolutions, passed by the Public Health Section:—

1. "That vaccination should be uniformly enforced in all the States, with a view to an early alteration of the existing quarantine arrangements. 2. That the Federal and State Parliaments be requested to institute the necessary legislation to give effect to this resolution." The resolution was adopted.

2. "That in view of the infectious and contagious character of the tuberculous disease this Congress is of opinion that sanatoria for consumptive patients should be established at distances from all towns and villages with at least an area of 200 acres. That the sanatoria should be Government institutions. That the buildings should be, as far as possible, of a temporary character. That a copy of these resolutions be sent to the various health authorities."

Dr. T. M. MASON (Wellington, N.Z.) said that the definition of sanatorium was a place where consumption was treated, and it was a very foolish thing to bring up at all. The suggested area of 200 acres was excessive.

Dr. A. H. CLARKE (Hobart) said he had been asked by the President of the Medicine Section to express his disapproval of this resolution. The members of the Medical Association did not consider it necessary that 200 acres should be set apart for an institution. It was a pity to impress people with the belief that infection would spread, as the resolution suggested. It would bring about opposition in the proposed neighbourhood of a sanatorium. The fear of infection would prevent people in the early stages of consumption going into such institutions. He supported Dr. Mason's views.

Professor ALLEN said that Government control was a large question.

Dr. CHERRY was prepared to omit the reference to area and Government control. How about buildings? Should they be of a temporary character? Some thought that the buildings of a substantial character became saturated with tubercular organisms, and that re-infection went on.

Dr. W. T. HAYWARD (Adelaide) hoped that the resolution would be withdrawn altogether. It would minimise the value of the Congress if they sent up debatable matter to the Governments.

Dr. J. C. VEROO (Adelaide) agreed with Drs. Mason and Hayward. "Villages and towns" was indefinite. The Government would ask what the Congress meant. He thought it was undesirable to pass the resolution at all.

Dr. W. MACANSH (Brighton, Victoria) said it was felt by the section that, in view of the money being raised for sanatoria, they should not be placed in health resorts of the healthy.

The resolution was then put to the meeting, and negatived.

3. (a) "That in the opinion of this section, in consequence of the prevalence of waterborne diseases in campaigns, instruction in hygiene, including the sterilisation of drinking water, should form part of the field training of the soldiers; (b) as far as practicable, the drinking water supplied to the soldiers should be sterilised before issue." This was agreed to.

4. "It is desirable that a school of tropical medicine should be established for the scientific and systematic investigation of tropical diseases in Australia." The resolution was adopted.

5. "That, in the opinion of this Congress, steps should be taken by the States of the Commonwealth and New Zealand to unify the Public Health Acts throughout Australasia." This was agreed to.

6. "That for the purpose of collecting and imparting information upon all matters connected with the subject of public health, a national society be formed, to be styled 'The Sanitary Institute of Australasia.'" The resolution was negatived.

7. (a) "That steps should be taken by the department of public education, and other public departments, throughout Australasia, to make and keep the water supplies, the water-closets, urinals, and other sanitary conveniences, including floor space and ventilation of all public buildings, in such condition as to be object lessons to the public; (b) that the elements of hygiene, somewhat after the lines adopted in New Zealand, should be part of the State School curriculum." This was rejected.

8. "That the term 'Pestis Minor' should not be applied to non-plague cases."—Approved.

Eye, Ear, and Throat Section.—Dr. T. S. KIRKLAND (Sydney) brought up the following resolution from the Eye, Ear, and Throat Section:—"That the attention of the Colonial Governments be called again to the resolutions passed by the Intercolonial Medical Congress held in Dunedin in 1898, on the subject of the standard of vision in sailors and railway men, and that the urgency of their adoption should be again emphasised, with the recommendation that a uniform standard for all the colonies be fixed, not lower than the highest standard at present demanded in any of the colonies for both form and colour." A standard for railway men was attached.

The resolution was adopted.

TIME AND PLACE OF NEXT CONGRESS.

Dr. KESALL (West Australia), on behalf of the West Australian Branch of the British Medical Association, invited the Congress to hold its next meeting at Perth. He said that he had been deputed to extend a hearty invitation to Congress to hold its next session in Perth. If members accepted the invitation of the profession in West Australia, he could promise them a most cordial welcome. He moved:—"That the next session of Congress be held in Perth."

Dr. W. H. LOVEGROVE, also, on behalf of the profession in West Australia, seconded the motion, and assured Congress of a genuine hearty welcome and reception in Perth.

Dr. KENT-HUGHES said he did not wish to appear selfish or ungrateful to their Perth friends; but he thought that the work of Congress was of too much importance to allow sympathy or sentiment to over-ride judgment. They should consider the matter very seriously—if Perth was not too far away, how was it that so few members came from Perth to the Congress?

Dr. MCKAY, whilst appreciating the West Australians' invitation, thought it would be a great mistake to hold the next Congress at Perth. Probably in the

near future West Australia would have its overland allway, and then the session could be held at Perth.

Professor ALLEN (Melbourne) suggested that the profession in West Australia be first thanked for their hearty invitation. He moved accordingly.

Dr. MASON (New Zealand) seconded the resolution, which was carried with acclamation.

Professor ALLEN said as Tasmania and West Australia were the two least populous States, it would be a mistake to hold Congress in those States in succession. It would be much better to dovetail the meeting in Perth between meetings in the larger States.

Dr. KELSALL then withdrew his motion.

Dr. C. TODD (Adelaide) then, on behalf of the profession in South Australia, extended a hearty welcome to members to hold the next Congress in Adelaide during July or August, 1905. He pointed out that Adelaide was the first place in which an Intercolonial Conference of the profession was held. They had considered the possibility of Congress meeting in Adelaide, and they were unanimously of opinion that the most suitable president on that occasion would be Professor E. C. Stirling, who helped to originate the Medical School in Adelaide, and was at present Professor of Physiology in the Adelaide University, and a director of the Museum.

It was decided that the next session be held in Adelaide, in 1905.

ELECTION OF PRESIDENT.

Professor ALLEN moved :—"That Professor C. E. Stirling, C.M.G., F.R.S., M.D., Cantab.; F.R.C.S. Eng., be President of next Congress." They all knew his learning, his courage, and also his work, and they knew the indebtedness not only of the profession in South Australia, but in all the States to the labours of Professor Stirling. The motion was carried amidst prolonged applause.

VOTES OF THANKS.

Professor ALLEN said it was his privilege to move :—"That a hearty vote of thanks be accorded by Congress to His Excellency the Governor and Lady Havelock for their kindness to members of the Congress." They were much indebted to His Excellency for being present at the opening ceremony, and for the hospitality of His Excellency and Lady Havelock. The motion was carried with cheers.

Dr. J. C. VERCO (Adelaide) moved :—"That the thanks of Congress be accorded to Rev. E. Stephen and Dr. Scott, D.D., for conducting special services to members." He was sure the members appreciated the services, and especially the excellent references to medical men. Carried by acclamation.

Dr. J. THOMSON (Brisbane) moved :—"That special votes of thanks be accorded to the following ladies and gentlemen for their hospitality :—The Hon. the Premier and Mrs. Lewis, His worship the Mayor and Mrs. Kerr, Senator and Mrs. J. Macfarlane, the directors of the Union S.S. Co., president and members of the Central Board of Health, the Tasmanian, Hobart and Athenæum Clubs, Newland and Sandy Bay Golf Clubs, and Hobart Bowling Clubs." The motion was carried with prolonged applause.

Dr. J. MASON (New Zealand) moved :—"That hearty votes of thanks be accorded to His Worship the Mayor and aldermen, the president, committee, and members of the Hobart Chamber of Commerce, the trustees of the Tasmanian Museum and Art Gallery, and the Council of the Royal Society for the use of rooms, and to the trustees of the Botanical Gardens for the use of plants." Carried by acclamation.

Dr. LOVEGROVE (West Australia) moved :—"That the hearty thanks of congress be accorded to the

Government of Tasmania for printing, etc., to the Minister of Railways and General Manager of Tasmanian Railways, to the Railway Commissioners of Australia and New Zealand, and to the shipping companies, for the concessions granted to members. Carried by acclamation.

Dr. W. T. HAYWARD (Adelaide) moved :—"That a special vote of thanks be accorded to the press for the very full and accurate reports they have given to the proceedings of congress." Carried by acclamation.

Professor ALLEN moved :—"That a special vote of thanks be accorded to the general secretary, Dr. Gregory Sprott for his untiring efforts on behalf of congress; to the treasurer, Dr. J. E. Wolfhagen; to the secretaries of sections, and to local State secretaries."

The motion was carried with enthusiasm, members standing and giving three ringing cheers.

Professor WATSON said he had sincere pleasure in moving hearty thanks to their President, Dr. Butler, for the able manner in which he had presided over their meetings; to the whole of the profession in Tasmania, and to the President and Mrs. Butler for their hospitality and general all-round goodness. Members had come, they had seen, and they had been conquered—by kindness and hospitality. The motion was carried amidst hearty cheers.

Dr. BUTLER, who was received with loud applause, said after what had fallen from Professor Watson he felt gratified, not alone for himself, but for all Tasmania. He was flattered by the response they had given to the motion, and the appreciation of the work done by the people of Hobart, and the profession of Tasmania. It would be absurd for him to say that their work had been little, because when divided amongst so few, comparatively speaking (for Tasmania was not one of the largest States), the work had been hard, but they were quite repaid by knowing that the visitors had been pleased and satisfied.

Dr. SPROTT, who was received with cheers, said he hoped they would take his speech as read. The profession and people were equally delighted to have the congress in Hobart, and more so to know that they had enjoyed themselves. For the congress, success did not depend on any individual, but on the whole of the profession in Tasmania. Their president and treasurer worked hard, and they had the result.

The proceedings then terminated.

PROCEEDINGS OF SECTIONS.

SECTION 1.

MEDICINE.

DR. A. H. GAULT (Adelaide) read a paper on "A Plea for the Sanatorium Treatment of Consumption." This was discussed by the President, and Drs. Verco, Harvey, Wilkinson, Jarvie Hood.

Dr. SYDNEY JAMIESON (Sydney) read a paper on "The Serum Diagnosis of Disease, with special reference to the Re-action in Typhoid Fever," and Drs. Mason, Wilkinson, and Howard discussed it.

Dr. A. JARVIE HOOD (Sydney) read a paper on "Epidemic Cerebrospinal Meningitis," which was discussed by the President, Drs. Officer, S. Jamieson Verco, Wilkinson, Woodward, Nhill, and others.

Dr. W. T. HAYWARD (Adelaide) read a paper on "Empyema." A discussion followed, in which the following members took part :—Dr. Sydney Jamieson, Jarvie Hood, and Wilkinson, of Sydney; Howard and Officer, of Melbourne; Verco and Todd, Adelaide; Johnson, of Mount Gambier; and Radie, of Bendigo, Victoria.

Dr. M. M. OFFICER (Melbourne) read a paper on "Enlarged Bronchial Glands in Children." He said that chief among the causes was tubercle. Other causes were influenza, measles, whooping cough, catarrh. Any enlargement after a month was tubercular. Diseases of the bronchial glands were very common among children. His chief object was to direct attention to the large number of cases of incipient tubercle going about.

Dr. HARDY (Hobart) read a short paper descriptive of a case of skin disease in his practice, which had been variously diagnosed, and resisted treatment. The patient was exhibited. The case was discussed by Drs. Bennett and Herman Lawrence, and the President said that Dr. Hardy would be glad to hear from any member of the Section upon the case.

Dr. W. McMURRAY (Sydney) read a paper on "Röntgen Rays in the Treatment of some Skin Diseases," which he had found to be beneficial. A few observations on the paper were made by Dr. Herman Lawrence.

Dr. HERMAN LAWRENCE (Melbourne) read a paper on "Skin Markings as an aid in the Diagnosis, Prognosis, and Treatment of Certain Skin Diseases." Dr. Verco made a few remarks upon the paper.

Dr. W. CAMAC WILKINSON (Sydney) read a paper on "Tuberculin as a Remedy in Pulmonary Tuberculosis."

Dr. GAULT (Adelaide) said that his use of tuberculin had not been satisfactory.

Dr. VERCO (Adelaide) remarked that his perusal of the literature upon the subject did not impress him favourably with tuberculin.

The PRESIDENT said that in Melbourne its use had been practically abandoned.

Dr. SYDNEY JONES (Sydney) asked was it wise to adopt a plan of treatment which was attended with possible risks, and use it in place of a treatment which produced no ill results at all? Men of the highest standing had reported against the use of tuberculin. In England, and Europe generally, all that was ascertained was that, in some cases, tuberculin had been used with success.

Dr. WILKINSON said that Dr. Heron, of London, recently spoke of tuberculin as "a boon to humanity."

Dr. MILLS (Sydney) said that Dr. Wilkinson's figures were not calculated to impress one with the value of tuberculin.

Dr. WILKINSON replied, and cited statistics in support of the effective use of tuberculin. The matter was one that required a great amount of investigation, and the time at his disposal in the Section did not afford him an opportunity to deal with it exhaustively.

Dr. G. H. HOGG (Launceston) read a paper on "The medicines of the aborigines of Tasmania."

Dr. F. GOLDSMITH (Palmerston) read a paper on "The necessity for education in tropical medicine in Australia." He said that though they in Australia could, he thought, pride themselves on being up-to-date in most matters connected with the various branches of their profession, there was one branch of science in which they were likely to be behindhand, unless some steps were taken, and that was in the investigation of and instruction in those diseases peculiar to tropical life and climate. During recent years one of the most striking features in medical matters had been the attention bestowed in England upon the branch of science known as tropical medicine. Following upon the investigations of Dr. Manson, Surgeon-Major Ross, and others, in the germ origin of malaria, with proofs of its infection by means of certain kinds of mosquitoes, the attention of scientists was

directed towards diseases peculiar to tropical life. It was pointed out that a very large percentage of medical men, after qualifying, found themselves engaged in the military, naval, colonial, and Indian service, or as private practitioners in the tropics, combating diseases in which they had received little or no instruction during their student days. Knowledge, of course, came with experience but probably in the interim many lives had been lost which might have been saved had such knowledge been gained in the lecture rooms and hospitals instead of in the field. As a result of these representations Schools of Tropical Medicine were formed and opened in London and Liverpool, and it was probable that in the not far distant future the examinations for the Army, Navy, Indian, and Colonial Services would include papers on Tropical Medicine. The valuable work consequent upon the establishment of these institutions was only just beginning. Commissions had been sent out from time to time to investigate the causes of such diseases as malaria, plague, and yellow fever, and there was no doubt that with a fuller knowledge of the cause better means for the prevention and cure of these diseases would be evolved, with a marked diminution of mortality. There were within the tropical zones such large centres of population as Rockhampton, Townsville, Cooktown, Cairns, Chillagoe, and Charters Towers, not to mention many smaller towns and settlements in the vast districts of North Queensland, Northern Territory, New Guinea, and Western Australia, while Brisbane, and in fact the whole of Southern Queensland, was only just over the border line. They had already seen such diseases as malaria, dysentery, chronic enteritis, ankylostomiasis, beri-beri, filariasis, leprosy, dengue, plague, cerebrospinal fever, and others present in an endemic or epidemic form. Thousands of our men had gone to South Africa, and were returning, and already they found in one of them the presence of the bilharzial parasite. Were we not in daily communication with India, China, and the Pacific Isles, and other countries in the tropics, from which disease might be introduced? The outbreak of plague in 1899 was still fresh in the minds of most of us. He advocated the founding of a Tropical School or Board of Medicine in Australia.

Dr. GOLDSMITH then submitted the following report of the committee, consisting of Drs. Ham (Brisbane), Blackburn (Sydney), and Goldsmith, appointed at a former meeting of the Section, on a School of Tropical Medicine:—

"The committee consider it desirable that a School of Tropical Medicine and research should be established for the scientific and systematic investigation of tropical diseases in Australia, and to this end they recommend the following:—

"1. That Brisbane would be the most suitable place to carry out such investigations.

"2. That the proposed school should be established on lines similar to those of the School for Tropical Medicine in London.

"3. That the Rt. Hon. the Premier of the Commonwealth, and the Premiers of the various States, should be officially approached by the Executive of this Congress for grants to enable such an institution to proceed with its work, and that the Rt. Hon. the Secretary of State for the Colonies, and Dr. Patrick Manson, the head of the School of Tropical Medicine in London, be communicated with on the subject.

"4. The section recommends the Congress to appoint Dr. Goldsmith as its representative in England."

The report was adopted, and ordered to be sent on to Congress.

At the conclusion of the business of the Section Dr. VERCO moved a vote of thanks to the President and the Secretary (Dr. A. H. Clarke, of Hobart), which was passed by acclamation.

SECTION 2. SURGERY.

Dr. WM. MOORE (Melbourne) read a paper on "The Treatment of Appendix in Cases of Abscess," which was followed by discussion, in which Professor Watson, Drs. Russell, Syme, Hinder, and Barnett took part.

Dr. J. B. NASH (Sydney) read a paper on "Some Observations in Relation to Nephrectomy," which was discussed by Drs. Hinder and Moore.

Mr. G. A. SYME (Melbourne) read a paper on "Prostatectomy," which was followed by discussion.

Drs. C. E. TODD (Adelaide) and J. B. GUNSON (Adelaide) read a paper on "A Case of Oophorectomy in Mammary Cancer, Thyroid Feeding, and X Rays for the Ulceration."

Dr. HAMILTON RUSSELL (Melbourne) read a paper on "The Congenital Factor in Hernia."

Dr. W. A. WOOD (Melbourne) read a paper on "Five Cases of Congenital Dislocation of the Hip, Treated by the Lorenz Method."

Drs. CLENDINNEN, SYME, HINDER, MOORE, RUSSELL, and the PRESIDENT (Dr. Barnett) discussed these papers.

SECTION 3. EYE, EAR, AND THROAT.

The PRESIDENT of the section, Dr. T. K. Hamilton, M.D., F.R.C.S.I., Adelaide, delivered an address there was a large number of members present including representatives from most of the States.

The PRESIDENT, after making some preliminary remarks, proceeded to deal with the subject of specialism in relation to general medicine. He first drew attention to the indebtedness of general medicine to specialism, as represented in this section, and, secondly, the indebtedness of specialism to general medicine, and adduced several instances under each heading, by way of illustrating this connection. He next referred to tubercular and malignant diseases, and the advances of the modern pathology and treatment of these conditions, as they present themselves to the specialist of to-day. Under the heading of tubercular disease, he drew attention to the campaign which has of late been entered upon all over the world to try and exterminate tuberculosis. He expressed the hope that the day had already commenced to dawn when the prophecy made by Professor Koch in his recent speech at the Tuberculosis Congress in London, would be fulfilled, viz., that ere long under the now recognised hygienic principles of treatment, so essential in combating these diseases, 50 per cent. of the lives now sacrificed would be saved. Special mention was made of some comparatively recent methods of cure, such as that by the X Rays, the Finnsen light method, and high potential currents.

On the motion of Dr. JACKSON (Melb.), a hearty vote of thanks was passed to the President for his able address.

Dr. E. GAULT (Melbourne) read a paper on "Cases of Small Absolute Scotoma, caused by Hemorrhage in the Optic Nerve."

Drs. WEBSTER, JACKSON, POCKLEY, HENRY, and the PRESIDENT made remarks on the paper, to which Dr. GAULT replied.

The SECRETARY (Dr. G. H. Hogg, M.D., Launceston), read a paper on "Cataract Extraction," by Dr. W. M. Stenhouse, M.D. (Dunedin), which was followed by general discussion.

Dr. R. POPE read a paper on "Prognosis and Treatment of Syphilitic Diseases of the Eye," which was discussed at length. Drs. JACKSON, KIRKLAND, HOGG, POCKLEY, HENRY, Symons, HUGHES, GAULT, and the PRESIDENT taking part therein.

Dr. F. J. CLENDINNEN showed two cases of foreign body in the eye, diagnosed by the X Rays.

Discussion took place "On the Treatment of Middle Ear Suppuration, other than the Radical or Mastoid Operation." The subject was introduced by Dr. ARTHUR (Sydney), and was debated by Drs. KIRKLAND WEBSTER, KENT HUGHES, HANKINS, BARRETT, HOGG, and the PRESIDENT.

Dr. T. S. KIRKLAND (Sydney), read a paper on "Sinus Suppuration." General discussion followed, Drs. KENNY NIHILL, BARRETT, and the PRESIDENT taking part.

Dr. HOGG, of Launceston, read a paper on "Rare Cases of Eye Disease."

A paper on "A certain condition of the cilia associated with interstitial keratitis" was read by Dr. SYMONS, of Melbourne.

A discussion of the latter paper followed, in which Dr. Kent Hughes and Dr. Nihill took part.

The PRESIDENT read a paper on "Nasal stenosis, due to deflections on the septum." The paper was afterwards discussed by Drs. HANKINS, BARRETT, ARTHUR, and KIRKLAND.

SECTION 4. MIDWIFERY AND GYNÆCOLOGY.

Professor A. WATSON (Adelaide University) read a paper on "Some points in connection with the Gynæcological Surgery of the Round and Broad Ligaments," which was followed by a general discussion.

The following papers were also read:

"A Case of Fœtal Tumour of Sacrum causing Dystocia at Term." Dr. WISHAW, late of Croydon, England.

"A Plea for the More Frequent Use of Chloroform in Confinement." C. J. PIKE, M.B., M.R.C.S.

"On the Treatment of Chronic Pelvic Suppuration." G. ROTHWELL ADAMS, M.D.

"Some Interesting Gynæcological Cases." JAS. HAMILTON, M.B.

"Ectopic Gestation." G. HORNE, M.B.

"On a Case of Symphysiotomy." Dr. E. A. MACKAY.

"An Analysis of 700 Consecutive Confinements in Private Practice." Dr. H. OSBURN COWEN, Eaglehawk (Vic.).

"Notes on Puerperal Sæpræmia and Septicæmia." Dr. F. A. NYULASY, Melb.

The PRESIDENT (Dr. Ralph Worrall, of Sydney) delivered his presidential address "On the Progress of Gynæcology since the first Inter-State Medical Congress, and the relation to Gynæcology to General Surgery." See page 112.

The President of Congress, in moving a hearty vote of thanks to the lecturer, said he desired to take that opportunity of expressing the deep obligations they were all under to the various members who had prepared such splendid papers for the Congress.

The vote was carried by acclamation.

SECTION 5. PUBLIC HEALTH.

The following papers were read:—

"The Rational Method of Sewage Disposal," by T. M. Kendall, L.R.C.P. & S. Edin., Sydney (to appear in a future issue).

Dr. W. L'ESTRANGE JAMES, of Newcastle (N.S.W.), read a paper on the "Diminution of Waterborne Diseases in Campaigns." He said that ever since advancing

civilisation had endeavoured to humanise warfare, and thoughtful care and nursing had been provided to alleviate the suffering of the sick and wounded, the mortality from cases had been considerably reduced; but the number of sick casualties occurring to-day, with all our advance of knowledge in the causes and avenues of disease, compared with the number of sick casualties in former campaigns, when our knowledge was not so great, shows little, if any, reduction, and sickness is as great a factor to-day in determining the effective strength of a force, other things being equal, as it was 100 years ago. It would be allowed on all hands that this should not be, but the fact remains that it is so. Take the present South African war. The War Office returns to the end of September, 1901, show the following reduction in the force, due to casualties:—Officers, 3,270; men, 72,292. Losses to the army from disease:—Deaths from diseases, 10,293; sent home or invalids after sickness, 49,000. This is approximately 50,000 out of 75,562. In this number no account is taken of all the non-efficient in hospital. Of the deaths from disease enteric accounts for 6,086 out of 27,649 non-commissioned officers and men. He could get no return as to dysentery and diarrhoea, but any medical officer who had been to the front would endorse the statement that fully 50 per cent. of the non-efficient are caused by the three diseases of enteric, dysentery, and diarrhoea. These, with cholera, are the four diseases that have played most havoc with many of our fighting forces in India. Thus disease was many times more dangerous to the soldier than the enemy, and if some means could be adopted for minimising this evil, which would at the same time answer service conditions, then an immense advance in the humanising of warfare would have been made. Cholera, enteric, dysentery, and diarrhoea were spread by means of drinking water which, by some means or other, had become polluted and infected, and occasionally, also, through the agency of dust and flies. Water so polluted might be sterilised by heating, filtration through special filters, and by using certain chemical re-agents. All these methods had been used to a certain extent, and in some instances with success, but on the whole, failure. The writer advocated educating the soldiers in sanitary precautions, and how to sterilise water before drinking it. The service should supply such water. Filters prove too slow and troublesome to answer service conditions. The sterilisation of water by chemical means would not answer on a large scale for many reasons, but for emergency purposes he could not conceive anything that could possibly answer service conditions better, provided re-agents can be found that will effectually sterilise infected water without rendering it harmful and unpalatable. Such a re-agent has been recommended by Drs. Rideal and Parkes in acid bisulphate of soda, 15 grains of which will sterilise one pint of water infected with the germs of cholera, enteric, etc., in half-an-hour. These are put up in compressed tablets of five grains each, and every soldier should be provided with small bottles containing 100 tablets to carry on his person. For sterilising water on a large scale he recommended heating. He explained an apparatus he introduced for the purpose in Pretoria, being inexpensive and did not require trained men to use it. He also recommended hygienic drill, instruction of officers in field sanitation, hygiene and preventive medicine, and the rules as to pay of soldiers to be so much for service, so much for every day of efficiency, a man incapacitated from wounds to be entitled to a bonus, but not from sickness. Care should be taken not to pollute any water, food to be protected from contamination by flies, dust,

etc. All vegetables eaten uncooked washed in sterilised water, and a course of training of officers in matters of health, which the writer detailed, and prizes awarded to the best at the end of a campaign. Two trials had been made with his proposed apparatus at Sydney Barracks, and were very successful.

Dr. MORGAN MARTIN (Sydney), who had been in the campaign, warmly commended Dr. Eames's paper and the apparatus of his invention.

Dr. HAM said that if anything had been proved during the campaign in South Africa, it was that the bacillus was more deadly than the bullet, and the microbe than the Mauser. As he found when in the "Guards" in London, it was very difficult to make Tommy Atkins a sanitary unit. They, however, knew what good work Dr. Eames had done during the campaign, and had confidence in his invention.

Drs. McDOWELL and the PRESIDENT warmly complimented Dr. Eames, and he was accorded a hearty vote of thanks.

Dr. A. S. JOEKE, Prahran, Melbourne, read a paper entitled "Notes of the needs of the metropolitan asylums of Melbourne." He had had experience of some eight years as official visitor of the metropolitan asylums of Victoria, and an extended visit to the asylums of New South Wales. As to the Kew and Yarra Bend asylums, the latter is not a modern hospital in any sense of the term. The main building in the male enclosure consists of two large barrack buildings, with most defective accommodation. In connection with these buildings are some small wards, but at night time, owing to practically no ventilation, they become veritable black holes of Calcutta. The detached cottages for the quieter class of patients were commended. What is needed to make Victorian asylums equal to any is an efficient body of Commissioners, instead of the Public Service Board; appointment of official visitors, whose powers might become somewhat extended. The superintendent of each asylum should be held personally responsible for what goes on in his asylum. The medical staff should be increased, and properly paid. One medical officer to 200 patients is quite little enough if records of cases are to be kept and scientific notes to be published. All male and female nurses should be efficiently trained and distinctly clad. All patients properly housed, separately treated, and properly sub-divided. Each and every asylum should have a proper and separate hospital and dispensary. The beautifying and adorning of the buildings should be encouraged. A receiving ward should be promptly pushed on with. Private asylums and treating insane in private hospitals should be rigorously abolished. Name "lunatic asylum" should be done away with and "hospital for the insane;" and "male and female attendants" for word "warders." Gradually the old barrack buildings should be altered, so that the corridors be kept as corridors, dining rooms used as dining rooms, and obstructions to ventilations should be removed. To do this properly a special architect should be attached to the department, who should do the work of repairing and rebuilding what might be considered necessary by the Commissioners, instead of letting the money that is allotted for repairs filter through the Public Service Board. If these reforms were carried out it would be safe to say that in 10 years' time the Victorian system of asylums would be equal to any in the world.

Dr. LOVEGROVE (Perth) approved of the paper, dwelling on the importance of pleasant surroundings at asylums.

Dr. STELL (Ballarat) preferred an attendant to every eight patients, not ten.

Other speakers generally approved of the paper, for which Dr. Joske was thanked.

Dr. JAS. JAMIESON (Melbourne) read a paper on "A milk epidemic of typhoid."

The PRESIDENT of the section (Dr. Cherry) read a paper on "Six Months' Daily Examination of the Melbourne Improved Water Supply." He claimed that the result was very satisfactory. The lowest number of germs obtained per cubic centimeter was 3; in some cases 6 and 8; average, about 80; 100 was regarded as very good; anything above 300 was looked upon as suspicious.

Dr. HAM (Brisbane) congratulated Melbourne on having such a pure water supply. In his city they had some thousands of germs in the water per cubic centimeter.

Mr. McDOUALL asked if the great amount of sunlight in Australia helped to purify the water?

Dr. CHERRY did not think so. All depended on the influence of sedimentation. In slow running rivers with large bodies of water, like the Goulburn, the sedimentation was good.

Dr. JAMIESON (Melbourne) was very sceptical about the improved water supply of Melbourne, having tended to reduce cases of typhoid. The improvement had mostly been as to reticulation. Parts of Melbourne, up to two or three years ago, were great typhoid centres. Since then there had been a striking decrease, till the typhoid rate had fallen to as low as the London rate, and that was saying a great deal. He attributed this great improvement to deep drainage. Melbourne, like Munich, had not benefited so much from an improved water in regard to typhoid as it had by underground drainage. Port Melbourne, until it had been drained, was a great typhoid centre, but since then they scarcely got a case there. The years when that and other parts of Melbourne, now drained, were most free from typhoid, showed more cases by very many than since deep drainage had been established.

Dr. CHERRY read a paper on an examination of the Melbourne Milk Supply for the tubercle bacillus, and the result was that 2 in 51, or, roughly, 4 per cent. of the unsuspected cows, and 2 in 36 of the suspected cows were tuberculous. The tests were made with guinea pigs, by subcutaneous injections in to the peritoneal cavity.

Dr. MASON (New Zealand) opened a discussion on the subject of "Quarantine." He said the question to be considered was how to secure the greatest safety with the least possible interference with trade. It was difficult to frame regulations for diverse diseases like plague and small-pox. There was an absolute necessity for differential treatment to be adopted for ships arriving from different countries. One important feature to be considered was—Did the disease they were trying to keep out exist in the country that an effort was to be made to protect? Dr. Mason then detailed what steps were taken in New Zealand to prevent the introduction of plague to that colony.

Dr. HAM (Queensland) said he understood the question to be considered was—"Medical inspection as against quarantine." Medical inspection was all right in Great Britain. Such a system required a large, highly organised, and well trained body of officials, health authorities, medical authorities, and police authorities. The system worked well in England, but would it do so here? In Australasia the staffs would be numerically small, and a large extent of country had to be travelled over that was difficult of access, and which offered no hope of tracing passengers. He would be glad to fall in with a scheme of medical inspection if it could be made effective, and properly carried out.

But until such a system could be established they must proceed cautiously.

Dr. LOVEGROVE (W.A.) agreed that immense injury was done to commerce by quarantine. He had, however, previously taken the stand and he saw no reason to alter his opinion, that commerce, as represented by large shipping companies, could by insisting upon vaccination of their passengers and crew at the various ports of embarkation, protect themselves in such a degree that there would be little, if any, danger of outbreaks of small-pox on the voyage of any vessel so protected. It was, however, necessary for the authorities to take every precaution to protect the public health, and every precaution should be taken to keep small-pox out of the States. He could suggest no better method than that of isolation, though personally he was in accord with the English system, viz., isolation of the case and surveillance of contacts.

Dr. E. J. CROUCH (Tas.) referred to the arrival of the steamer "Wakanui," and stated when he went on board there was nothing to indicate that small-pox existed on board. He had understood that the object of a quarantine station was to enable a ship to be cleared of a case of small-pox. If the medical officer on board had informed the captain that there was a case of small-pox the latter would surely have notified the health authorities at Capetown, and the patient would have been quarantined there. He favoured a system of isolation in preference to a costly system of quarantine.

Mr. A. MAULT (Tas.) hardly thought that anything useful could be done by passing a resolution that must to a certain extent be formal, and one that would not do what he understood Dr. Ham required. The whole question was one of arrangement, to decide what could be done to exclude either plague or small-pox. He favoured limiting the arrangement to small-pox, because any precaution against small-pox would be equally effective in regard to plague.

Dr. HAYWARD (S.A.) pointed out that cases of small-pox had been introduced to Australasia despite the existence of quarantine regulations. The doctors on boats had not such a light task, and were naturally biased in favour of diagnosing the disease as one of mild type.

Dr. KENDALL (N.S.W.) referred to the absurdity of the quarantine stations unless they were located on some isolated islands.

Dr. HAM admitted that a system of medical inspection might also allow a disease to enter a country, as was shown by the existence of small-pox in London.

Dr. CHERRY thought that the following resolution might be agreed to,—"That in the opinion of this Congress vaccination should be uniformly enforced throughout the States, with a view to the early alteration of existing quarantine regulations, and the Federal Parliament be requested to initiate requisite legislation to give effect to this resolution."

The motion was agreed to.

Dr. BURNETT HAM read a paper on "The Spirit of Hygiene in Australia." This was followed by a discussion. (To appear in a future issue).

Dr. CHERRY spoke on pseudo tuberculosis (caseous lymphatic glands) in sheep. It was probable that inoculation usually took place from sheep to sheep through the scratches and cuts produced at shearing time. The disease was spreading. The disease was important on account of the relation of the micro-organisms to that of glanders. At present glanders was not known here; but the close relationship was worth pointing out. Should the horse become affected, it

would be exceedingly difficult to diagnose it from glands.

Dr. MASON mentioned that the disease had been met with in New Zealand, and they had a prosecution for selling tuberculous meat based on this, which fell through.

Dr. CHERRY was not surprised, for the organism was not unlike tubercle. Unless care was taken it might be confused with plague bacillus and Hoffman's bacillus.

Dr. CHERRY gave an address on the Colon Bacillus, in relation to water supply. It is an indication in water of sewage contamination. He fully explained the bacteriological process of identification.

Dr. KENDALL (Sydney) made a few remarks, and Dr. CHERRY replied.

The section resolved, on the motion of Dr. HAM, seconded by Dr. GOLDSMITH, to forward a resolution to Congress next day in favour of a school of tropical medicine being established on a federal basis, and located at Brisbane.

The proceedings of the section were then closed, with a hearty vote of thanks to Dr. Cherry, proposed by Dr. LOVEGROVE, seconded by Dr. GIBLIN.

SECTION 6.

ANATOMY, PHYSIOLOGY, PATHOLOGY, AND PHARMACOLOGY.

President, Mr. J. H. Scott, M.D., C.M., Professor of Anatomy and Physiology, University of Otago, New Zealand.

Dr. D. M. Officer (Melbourne), read a paper entitled "A case of sarcoma of tongue with microscopic sections."

Dr. J. THOMSON (Brisbane), exhibited numerous lantern slides of micro-photographs, illustrating the micro-organisms found in the blood of typhoid, diphtheria, tuberculosis, plague, leprosy, anthrax, tick fever, and others. Also a series of non-pathogenic organisms.

ENTERTAINMENTS AT THE HOBART INTER-COLONIAL MEDICAL CONGRESS.

The President's Garden Party.—On Monday afternoon, February 17th, the President of the Congress, the Hon. Dr. G. H. Butler, M.L.C., and Mrs. Butler, gave a garden party on the Elwick racecourse to the members of the Congress and a few others. A special train, which left the Hobart station at 3.30, carried 600 ladies and gentlemen to the racecourse, and, in addition a good many went thither in private and other vehicles. Dr. and Mrs. Butler received the guests at the entrance to the course, and gave each a separate and cordial greeting. The vast majority of those present were visitors from the other States and New Zealand, but the few local people who gave a Tasmanian colouring to the gathering were happily representative. The Headquarters Band, under Mr. T. W. Hopkins, played some music on the lawn. The catering was in the hands of Mr. C. D. Haywood, and was done admirably. Refreshments were served in five different places, and thus crowding was prevented. Dr. G. Sprott, the Secretary to the Congress, was unflinching in his efforts to make everything go well. The train started on the return trip at 5.35, and deposited all safe in town again, thoroughly well pleased with their recreation.

The Reception.—The President and Executive Committee held a reception in the Royal Society's Rooms on Monday evening, February 17th, at 9 p.m. Amongst those present were the Vice-regal party, Ministers of the Crown, the President of the Legislative Council, the Speaker of the Assembly, the Judges, and a large number of visitors. The new Art Gallery was opened

for the first time, and was greatly admired. Refreshments were laid out in the new northern wing, and the function proved a great success.

River Excursion.—On Tuesday afternoon, February 18th, upwards of 600 persons availed themselves of the river excursion given to members of the Congress, and their friends by the directors of the Union S.S. Co. The steamer "Oonah" left the wharf at 2.30 p.m. for a run down the Channel. Unfortunately, shortly after leaving the pier rain set in, which continued for upwards of an hour, the beauties of Mount Wellington and the Channel being viewed literally under a cloud. However, the clouds soon lifted, and an enjoyable run to Green Island was made in good time, Hobart being reached on the return at 5.50. Hopkins' band helped materially to enliven the proceedings, and the officers of the Congress and of the "Oonah" were unflinching in their endeavours to entertain the visitors.

Senator and Mrs. Macfarlane's "At Home."—On Wednesday, February 19th, the members of the Congress and a few citizens were received by Senator James Macfarlane and Mrs. Macfarlane at an "at home" at their residence, "Newlands," New Town. About 400 ladies and gentlemen assembled in the beautiful and extensive grounds of "Newlands," which, with its gate-lodge and carriage drive, and homely residence is reminiscent of the typical country or suburban house of the old country. Senator and Mrs. Macfarlane received the visitors outside a little pavilion on the lawn. The Headquarters Band performed some music in the tennis court, under the direction of Mr. T. W. Hopkins, the bandmaster. Refreshments were served in a tea-house, and in two open tents. The greater number of those present were visitors from the other States, but the local community was represented. A special tram service took a large number of guests to "Newlands," and the others went thither in cabs and private carriages. The weather was beautifully fine, and, in all respects, the function passed off with *éclat*.

Congress Dinner.—The President of the Congress (Hon. Dr. G. H. Butler, M.L.C.), gave a dinner at the Tasmanian Club, on Wednesday evening, February 19th, to past presidents of congress and present presidents of sections, local secretaries, and Government representatives from the various States, the company numbering about 80.

Dr. VERCO (Adelaide), the senior past president of congress, proposed the health of their host, eulogising the work being done, and the excellent arrangements and the happy combination of work and social pleasure afforded the visitors. The toast was enthusiastically honored, and the President expressed his sincere gratification at learning that the arrangements met with the approval of their visitors.

Dr. SYDNEY JONES (Sydney), by leave of the host, as past president, introduced the toast of the executive, whom he warmly complimented, especially Dr. Sprott.

The President and the General Secretary (Dr. Sprott) replied, mentioning that they were greatly indebted to members of the profession in Hobart for having so well helped them in carrying out the arrangements.

Garden Party at Government House.—On Thursday afternoon His Excellency the Governor and Lady Havelock gave a garden party to the visitors at Government House. Unfortunately, showers of rain militated somewhat against the attendance, but the function was enjoyable. The Military Band, under Mr. Bandmaster Hopkins, played a nice selection of music.

"At Home" by the Premier and Mrs. Lewis.—The Premier, Hon. N. E. Lewis, C.M.G., and Mrs. Lewis were "At Home" at the Tasmanian Museum on Thursday evening. The function took place in the new large room of the Museum, which is to be used as a trophy and tourists' room. The Premier and Mrs. Lewis received the guests at the entrance to this room. A smaller oblong room, off the large one, was used as a refreshment room, and the picture gallery above was utilised for an entertainment by Mr. Clifford Walker, the talented monologue performer. Mr. T. W. Hopkins' orchestra played choice selections of music during the evening. The attendance included all the members of the Ministry, the two Puisne Judges of the Supreme Court, the Commandant of the Defence Force, members of both Houses of Parliament, the Mayor of Hobart, the Solicitor-General, and many others.

The Mayor's Garden Party at Salmon Ponds.—On Friday, February 21st, at 1.20 p.m., a special train left Hobart, conveying upwards of 600 guests to the above-mentioned fête. His Worship and Mrs. Kerr received the guests at the railway station. The train arrived at the Plenty station in good time, and vehicles were awaiting to convey those who chose to drive to the trysting place. Many, however, preferred to walk from the station to the Salmon Ponds. On arriving at the Salmon Ponds it was at once apparent that the hospitality of the Mayor and Mayoress had been displayed with the very best results. After the good things provided had been enjoyed, the visitors had an opportunity of inspecting the hatcheries, and of seeing the fish fed. The company was thoroughly representative, and the fête was enjoyable in every way. Hobart station was reached on the return journey at 6.50, and except for one slight shower, the day was fine and agreeably cool.

Visit to Hobart Quarantine Station.—On Saturday, February 22nd the President and members of the Board of Health, members of the Ministry and Legislature, chairman and members of the General Hospital Board, some of the local medical men, including Drs. Butler, Crowther, and Sprott, Mr. Henderson, local manager of the Union Steam Ship Company, and several members of the Intercolonial Medical Congress proceeded in the s.s. "Huron" to the Quarantine Station at Barnes Bay, accompanied by Mr. Mault, secretary to the Board of Health. Dr. W. T. Hayward, the South Australian Government representative at the Medical Congress, proposed the health of the President of the Board, and took occasion to thank him, on behalf of brother members of the profession, for the most pleasurable excursion. Incidentally he spoke in high praise of the station arrangements. Replying, the Hon. G. T. Collins expressed his great satisfaction at meeting so many members of the profession, and more especially at receiving, through Dr. Hayward, assurance of their hearty approval.

Mayor's Fishing Excursion.—The fishing excursion organised by the Mayor (Alderman Kerr) for members of Congress on Saturday afternoon, resulted in those who availed themselves of it getting grand sport, all returning to town delighted.

Bowling Match.—On Saturday afternoon a bowling match was played on the Hobart Green, between a team chosen from the club and a team of visiting medical men. The Hobart men were:—Messrs. G. S. Seabrook, 1; H. Drake, 2; S. P. Crisp, 3; R. Snowden (captain), 4. And the doctors were:—Drs. Willis (Malvern, Melbourne), 1; Rosenfeld (Port Melbourne), 2; Adams (Victoria), 3; Harold (Adelaide), captain, 4. The game was 25 heads, and the Hobart team won, making 27 points against the visitors' 25.

BRITISH MEDICAL ASSOCIATION NEWS.

PROCEEDINGS OF AUSTRALASIAN BRANCHES.

New South Wales.

A SPECIAL general meeting of the Branch was held at the Royal Society's Room on Friday, 7th March, 1902. Present: Dr. Foreman (President) in the chair; Drs. Lipscomb, Clarence Read, B. Bowman, Hankins, Martin, Todd, Gordon Craig, Traill, Levy, W. G. Armstrong, Spencer, Blackwood, Nolan, W. Odillo Maher, Millard, Tilley, Crago, Trindall, Chas. MacLaurin, John Harris, R. S. Bowker, J. A. Dick, Knaggs, G. L. O'Neill, McDonagh, Gledden, J. Morton, McClelland, Stokes, Walker Smith, Collins, Mary Booth, Beeston, D. Kelly, Hinder, Ludowici, Rennie, Furnival, H. Browne, Frizell, Arthur, Blackburn, Palmer, Marano, MacPherson, Binney, A. L. Kerr, McIlroy, Carruthers, West, Agnes Bennett, Hetherington, Sinclair Gillies, Burfitt, Doak, J. Wade, Sandes, Freyer, Brennand, Cosh, McLean, Megginson, Ludlow, Newmarch, Wood, Isbister, S. H. Hughes, Worrall, Mills, Maitland, Dixon, G. A. Marshall, Taylor Young, D. MacMaster, O'Gorman Hughes, D. Phipps, J. J. Kelly, S. Finlay, and others.

Visitors: Dr. Trotter, Dr. Windeyer, Dr. Edwards.

The circular convening the meeting was read.

The PRESIDENT explained that the Council had decided that the business of the meeting should be confined to discussing the relations of the A.N.A. towards the medical profession. He would call on Mr. Hankins to explain the reason for calling this special meeting.

The HON. SECRETARY related the events occurring since the general meeting of the profession on August 31st, 1900, which have led up to the present meeting. In October, 1900, a conference between representatives of the Council of this Branch and the Board of the Australian Natives' Association took place at the request of the latter. There the question of the £200 limit was discussed, with the result that the Australian Natives' Association declined to accede to such terms. In reply to a question as to whether the absence of the £200 limit was the only objection, the members of the Australian Natives' Association Board were informed that there were other objections, which were specified; but for the time being it was sufficient to base our main action on the absence of the income limit. It is necessary to state this fact, because in a circular issued by the Australian Natives' Association, dated February 27th, 1902, it is stated that this (the income limit) has been the only question of difference ever raised by the British Medical Association. On January 7th, 1902, the Council received another request for a conference, with which it could not see its way to comply. On January 21st the general secretary wrote to the effect that the Board of Directors of the Australian Natives' Association had decided to agree that £200 shall be the wage limit allowed all medical benefit members of their association, and assumed that this concession, in terms of the demands of the New South Wales Branch of the British Medical Association, would settle existing difficulties. The Council of this Branch then decided to submit the whole question to the members of the Branch, and informed the secretary

of the Australian Natives' Association that meanwhile the relations of this Branch with his Association would, of course, remain unchanged.

Dr. G. E. RENNIE moved the first resolution:— "That this Branch of the British Medical Association, having reconsidered the question of contract medical attendance on members of the Australian Natives' Association, hereby reaffirms the decision of the Council of the Branch of 7th August, 1900, in declaring the Australian Natives' Association a society prejudicial to the interests of the medical profession in accordance with Article of Association No. 35A." In speaking to the resolution, he said he thought before the specific question was discussed they should consider for a moment the position of medical contract practice generally. For a good many years past it had been the custom for members of the profession to recognise Friendly Societies, and to attend such at a reduced rate. Societies so recognised had been established on philanthropic bases, and he maintained that in so accepting and treating these societies the profession had made a concession on its part; but there were other societies that had absolutely no claim whatever on the profession. The former had been leniently dealt with on account of their having discharged a duty towards the wage-earning class. And he would point out that this concession on the part of medical men could be withdrawn at any time by them did it appear that they were being imposed upon. This rule of attendance upon the sick at reduced rates had been in force a good many years, and had been availed of more and more, and though originally granted simply to the wage-earning class, it had been gradually encroached upon by others. He would have them consider the number of persons at the present time anxious to join medical benefit societies for the purpose of obtaining cheap medical attendance, and it had become necessary for medical men to insist upon a wage limit. The wage limit question first came up in the year 1896. At that time a meeting of the profession was held, and the wage limit was fixed at £200 per annum. After long negotiations the Clerks' and Warehousemen's Association ultimately agreed to recognise this limit. The special consideration before them that night, however, was the position of the profession with regard to the Australian Natives' Association. This association had first been converted into a medical benefit society in this State the year before last. It had existed in Victoria for many years previously. He was opposed to this association because it sought to attract members to its organization by means of these medical benefits. The profession had nothing to do with the political aspect of the association, but they objected to it because it was not framed upon a philanthropic but upon a political basis. He considered that the foregoing was the strongest argument against the association. Its secretary, however, was endeavouring to make capital out of the wage limit question. They knew from the experience of medical men in Victoria what the position of affairs had become in that State. Evidence had been given by such practitioners that the members of the Australian Natives' Association demanded the most attention and were the most tyrannical of all the Friendly Societies in Victoria, and paid their medical officers at the lowest rate. Evidence of some of the leading men in the profession went to show that they were afraid to open their mouths because of the influence of the Australian Natives' Association in that State. If New South Wales medical men consented to negotiate with the Australian Natives' Association, the state of the profession here would be

but a repetition of that reigning in Victoria at the present time. He maintained that the profession must refuse to enter into any relations whatever with the Australian Natives' Association, for it was not a philanthropic association. Further, there is no need for this new medical benefit society. Ample provision exists at present in the form of lodges, clubs, etc., to enable any deserving man to secure medical attendance and medicine at reduced rates, and no hardship is forced upon any by their refusal to recognise or treat with the Australian Natives' Association as a medical benefit society. He urged the following three points as grounds for supporting the resolution:—1. That the Australian Natives' Association is not framed on a philanthropic basis. 2. That they knew the experience of medical men in Victoria in their dealings with the Australian Natives' Association past and present. 3. That there was no need for an additional medical benefit society in New South Wales. He begged to move the resolution just read.

Dr. GORDON CRAIG, in seconding the resolution, said that the question before them that night had been very clearly put in the three reasons given for combating the encroachments of illegitimate friendly societies. They recognised the wage earning class as the dividing line; but people of quite a high social standing would join the Australian Natives' Association, although they were in a position to pay ordinary fees, and by their example attract others until eventually private practice would be a vanishing quantity. So far from the Australian Natives' Association being a medical benefit institution it was purely a political organisation, and it sought to make use of the medical profession for the purpose of advertisement only. Of those who would join it could be said with safety that one out of every ten was in receipt of an income in excess of the limit fixed, whereas in an ordinary legitimate friendly society the proportion would be about one in a hundred.

Dr. BEESTON explained that he had come from Newcastle on purpose to attend the meeting for members of the British Medical Association in his district, and he believed those living in the country generally did not thoroughly understand the true position of affairs. He would like to ask what were the inducements held out by the Australian Natives' Association to medical men, in order to get them to accept their lodges?

The PRESIDENT replied that the only object of the Australian Natives' Association, which concerned the profession, was contract medical attendance for their members. Their other objects might be admirable, but were beside the question.

Dr. SPENCER remarked that the plea that the Australian Natives' Association was not formed on a purely philanthropic basis, might possibly be replied to that other societies not so based were recognised and treated as medical benefit societies, he would mention Catholic and Temperance Societies; personally he was in perfect sympathy with the object of the meeting, but he held that upon such an important matter as that before them they could not have too much light thrown on the question. He viewed the acceding by the Australian Natives' Association to the wage limit of £200 per annum as being a distinct concession gained, a tactical advantage which should only be abandoned for overwhelming reasons. With regard to the position of the profession in Victoria he would like to point out that their brethren in that State were, unfortunately, hopelessly divided in action and that their interests had suffered in consequence. Speaking for himself he was perfectly in accord with the object of the meeting, and like a soldier, was prepared to follow the leading of the council.

A Victorian practitioner was present, and he testified to the encroachments of the Australian Natives' Association in that State on the profession; in fact, it sought to dominate it. Although the profession was unhappily to a considerable extent divided in Victoria, yet he gave instances in which good work had been done by the Medical Defence Society in assisting the New South Wales Branch of the British Medical Association. At the inception of the Australian Natives' Association, members had, on joining, succeeded in gaining medical benefits. Some joined as single men, and agreed to pay 25s. per annum, but such men in due course married, and as the A.N.A. grew in strength it resulted in their medical officers being compelled to attend members' families at that rate; indeed, instances had occurred in which a member, by paying 12s. 6d. per annum to the doctor, succeeded in obtaining medical attendance for himself and family, his mother, sisters, brothers, under a certain age, or living with him. In country towns everyone belonged to the Australian Natives' Association, and private practice has declined to the vanishing point. He advised the profession in New South Wales to resist the attempt of the Australian Natives' Association to gain the upper hand in this State, warning his *confreres* that all baits such as a wage limit, and promises of payment by members of 25s. per annum would be thrown to the winds when once the Australian Natives' Association had obtained a firm footing in the State.

Dr. BINNEY asked if the Australian Natives' Association was objected to only on the question of medical benefits?

The PRESIDENT said such was the case.

Dr. CHAS. MACLAURIN was in complete sympathy with the resolution.

Dr. CLARENCE READ believed that even if they did agree to accept Australian Natives' Association members at the wage limit of £200 per annum, there would probably be members whose incomes were in excess of that limit joining and claiming medical benefits. Then on the medical officer objecting to such, would not the onus of proof rest on him? The officials of the Australian Natives' Association would not take it on themselves. He strongly advocated the adoption of the resolution. If they yielded once they would have to yield all along the line.

Dr. LEVY questioned whether a country practitioner could hold out against the Australian Natives' Association if it established a branch in his district.

Another member was of opinion that after the experience of the result of the working of the Australian Natives' Association in Victoria all that remained for the N.S.W. Branch to do was to show an unbroken front. The majority of members of the Branch were those resident in Sydney and its suburbs, and a boycott must if necessary be issued against all who worked against the interests of the profession.

Dr. BEESTON was convinced that the Australian Natives' Association could never introduce and subsidise a medical man of their own in any district, provided the resident doctors stood together.

Dr. HAROLD BROWNE said he thought the fate of the Junee Branch was sufficient answer to the fear expressed by the last speaker. This Branch collapsed, according to the *Herald*, some weeks ago, owing to the refusal of the two resident medical men to act as medical officers, and to the impossibility of the Australian Natives' Association obtaining a man to start practice there as their nominee. The threat of getting another medical man to start in opposition was a very usual one in a

country town where any dispute arose between medical men and lodges, etc. Such threats had, in his experience, come to nothing. Was it likely that a society paying its medical officers as low a rate as 12s. 6d. per member per annum would go to the expense of subsidising a medical man to start practice in a town in the face of united opposition. Such action would cost them, perhaps £500 to fully equip them.

Dr. NEWMARCH held that the united action of the Branch so proposed that night would materially help their colleagues in Victoria, and it might result eventually in their being able to cast off the yoke from their shoulders.

Dr. SINCLAIR FINLAY mentioned a case in which a suburban medical man on refusing to accede to the demands of the Australian Natives' Association had had an opposing doctor of more complacent disposition placed in his neighbourhood.

Mr. HANKINS said:—In the present discussion we have nothing to do with the Australian Natives' Association as a patriotic, national, or political society. There were many natives of Australia, I am proud to say, in the ranks of the British Medical Association, and each member was free to hold his individual opinion as to the objects and doings of the Australian Natives' Association. As a body we were only concerned with the Association in its character of a Medical Benefit Society, and we have met to-night to decide whether we are willing to enter into contracts for medical attendance on members of the association or not. During my recent visit to Tasmania, I have sounded many practitioners as to how the organisation was working, especially in Victoria. One gentleman practising in one of the larger towns said that he himself was medical officer to a Branch of the Australian Natives' Association. He found the work unobjectionable enough. The members were a superior class of club patients and lived, as a rule, in good houses, and in good style. On enquiry, as to the social and financial position of his patients, he said they included professional men, legislators, bank managers, mining directors—in fact all the "nicest" people in the place. He admitted that the other doctors had just cause for complaint—that their patients left them, but that if he gave up his appointment plenty of others would be ready to take it—and the Branch being thoroughly established, it could offer a decent income at first go off, to any man they might import into the town should the resident practitioners stand out. It is evident from this narrative that an organisation conducted on such lines must be a very bad thing for the profession. But it may be argued that if the Australian Natives' Association is willing to yield the income limit, such abuse could not exist. The fact is we have no confidence that the income limit can ever be properly enforced, especially in this instance, where it is conceded very tardily and unwillingly. We could hardly expect assistance from the officers of the association who look to the medical department as a means of attracting members. We have seen that when once a medical officer is appointed and has become dependent upon the association, he is not likely to be very active in questioning his patients' incomes—patients whom he would probably never see in any other capacity than as club patients. The mass of medical practitioners would only suspect what is taking place when they began to lose sight of their old patients, and found their work falling off. And they would find it extremely distasteful, if not impossible, to prove a case and obtain redress. Under these circumstances it would be much better to decline the contracts for medical attendance on members of

the Australian Natives' Association on any terms whatever.

Dr. GLEDDEEN wished to caution the members against rushing into print and replying to the numerous letters that would, no doubt, appear in the daily press as a result of their action; he rather advocated that all replies should be undertaken by their hon. secretary. He would move this in the form of a resolution if he were in order. This was seconded by Dr. O'NEILL, and unanimously approved.

Dr. WERRALL was called upon from all parts of the room to speak. He explained he had not intended addressing the meeting unless there had been some opposition to the motion. He read some letters from prominent medical men in Victoria, one from a gentleman whose name would be known to every one in the room were he to disclose it. The speaker emphasized the state of affairs in the sister State by affirming that no newspaper in Victoria dare publish a letter signed simply M.D., if the writer ventured to criticise the Australian Natives' Association, the proprietors demanded medical men who had such hardihood to furnish their names in full, and this inevitably called down the vengeance of the Australian Natives' Association upon the writer. In conclusion, Dr. Werrall urged his hearers to persist in the attitude taken up that night, assuring them that any treaty entered into with the Australian Natives' Association would certainly be broken.

Dr. KERR stated that he had been approached by the Australian Natives' Association, and had been informed by such that the British Medical Association was only opposed to them on account of the issue of the wage limit, and this question being settled there remained no logical objection to their association.

The PRESIDENT remarked that he would deal with the question in his forthcoming presidential address. As for the misgivings hinted at with regard to country districts they had already had proof that local medical men, by the help of the Branch, had successfully resisted the encroachments of the Australian Natives' Association.

The resolution was then put to the meeting and was carried unanimously by acclamation.

COUNCIL MEETING.

THE Council met at the Branch offices on Tuesday evening, 4th March, 1902, at 8.30 o'clock. Present:—Dr. Foreman, Hankins, Bennie, Crago, Newmarch, Abbott, Quaife.

The minutes of the previous meeting were read and confirmed.

The following members were elected:—Dr. E. A. Bardsley, Oxford Street, Waverley; Dr. H. M. Anderson, Sydney Hospital; Dr. L. E. Ellis, Children's Hospital, Glebe; Dr. Louis Vallee, Inverell; Dr. G. S. Samuelson, Armidale; Dr. R. L. Davies, Children's Hospital, Glebe; Dr. Margaret I. White, Children's Hospital, Adelaide, S.A.

Members nominated for election:—Dr. R. T. Mitchell, Wee Wee; Dr. C. C. Cocks, Wentworth.

Correspondence with regard to the Inverell Lodge, M.U.

Resolved—"That the matter be allowed to remain over until the result of the conference is received."

Correspondence with reference to the Australian Natives' Association was read.

Arrangements for the special general meeting on Friday, 7th March were made.

The following resolution was agreed upon, to be moved by Dr. Rennie, and seconded by Dr. Gordon

Craig:—"That the Branch, having re-considered the question of contract medical attendance on the members of the Australian Natives' Association, hereby re-affirms the decision of the Council meeting of 7th August, 1900, in declaring the Australian Natives' Association prejudicial to the interests of the medical profession."

Letter was read from the Commonwealth Medical Benefit Society with reference to medical attendance upon its members.

Resolved—"That the Council, having considered the proposal, declines to accede to the request."

Annual Meeting.—Resolved—"That the Annual Meeting be held on the 4th April, 1902."

The draft report of the Council for the year was considered and amended, also the report on the *Australasian Medical Gazette* was approved.

Accounts passed—Stamps, £2 13s. 9d.; Petty Cash, £5.

New Zealand.

THE opening meeting of the New Zealand branch of the British Medical Association was held in the Town Hall, Dunedin, on February 3rd, Dr. Colquhoun, of Dunedin, President, being in the chair. The question of the notification of infectious diseases was brought up by a Nelson delegate, but consideration of the matter was deferred till later in the week. Dr. Collins, of Wellington, was appointed chairman of the council, Dr. Mason, editor of the medical journal, and Dr. Campbell secretary. Dr. Colquhoun gave his presidential address on the evening of February 3rd.

Queensland.

A MEETING of the Branch was held on Friday, March 7th, with the following attendance:—Dr. P. Bancroft (President), The Hons. W. F. Taylor, and C. F. Marks, Drs. Lillian Cooper, Eleanor Greenham, Lockhart Gibson, Wheeler, Hardie, Carvoso, Turner, Orr, Cameron, Flynn, Salter, Connolly, Ure, Hawkes, Francis, Sutton, McEvoy, Eppie Dods, Culpin, Byrne, Nall, Clowes, Wild, and Brockway (Hon. Sec.). Visitor: Dr. Edith Ure.

Dr. CONNOLLY exhibited a uterus removed for fibroid, one tumour showing calcareous degeneration.

The PRESIDENT welcomed Dr. W. S. Byrne, on his return to Brisbane.

Drs. EDITH URE, ZWAR, PRING and HAMMOND were nominated for membership.

The PRESIDENT announced that it was a recommendation of the Council that the meeting in April be held at Toowoomba. The recommendation after discussion was adopted.

The adjourned discussion upon the resolutions with reference to the Brisbane Associated Friendly Societies' Medical Institute and its medical officers was resumed, and after discussion, it was unanimously resolved:—"That Members of the Branch shall not meet in consultation, medical practitioners employed by the Brisbane Associated Friendly Societies' Medical Institute, until the agreement entered into by them shall have been amended to the satisfaction of the Branch."

It was also resolved:—"That, except by a special resolution of the Branch at a meeting called for the purpose, the members of the Branch shall not meet in consultation medical men who are now employed or who shall after this date have been employed by the Brisbane Associated Friendly Societies' Medical Institute."

The second resolution:—"That members of the Branch shall not meet in consultation medical men who meet in consultation the medical practitioners employed

by the Brisbane Associated Friendly Societies' Medical Institute," gave rise to considerable discussion, and it was resolved that its further consideration be deferred until an occasion for its adoption were reported to the Branch.

In consequence of the lateness of the hour, a paper by Dr. W. S. Byrne was not read.

CORRESPONDENCE.

London.

(FROM OUR OWN CORRESPONDENT).

King-Edward's Hospital Fund for London—The King's Sanatorium—Adrenal Therapy—High Frequency Currents—The Cure and Causation of Cancer—The London Polyclinic—The New Postage Stamps.

By special desire of the King, the Prince of Wales's Hospital Fund, with the creation and success of which His Majesty when Prince of Wales was so closely identified, shall in future be known under the name of "King Edward's Hospital Fund for London." The distribution meeting of the Council was held at York House, St. James's Palace, on Saturday, December 28th, under the presidency of His Royal Highness, the Prince of Wales. In the absence of Lord Rothschild the financial statement was presented by Mr. Craggs, and showed that the nett receipts for the year amounted to £51,496 8s. 6d., which when added to £174,225 8s. 7d., the balance of funds from last year, made a grand total of £225,721 12s. A sum of £50,000 was recommended for division among hospitals, being £1000 more than the previous distribution. The Visiting Committee reported that they had visited eighty-five hospitals, to seventy-nine of which grants had been made, of the six left out, one institution was not in immediate need of assistance and the remaining five were considered ineligible because they required either reconstructing or rebuilding. Owing to the increased administrative work necessary to carry on the business of the fund and the increase of staff necessitated thereby, larger and permanent offices have been secured at 81 Cheapside, E.C.

Widespread interest has been aroused by the announcement, made on January 2nd that the King "had graciously consented to direct that a large sum of money placed at his disposal for charitable or utilitarian purposes, shall be devoted to the erection in England of a sanatorium for tuberculous patients." The munificent donor of this noble gift, which amounts to no less than £200,000, is Sir Ernest Cassel, K.C. M.G., the eminent financier. The *Daily Mail*, gives the following details of his career. "He was born in Cologne in 1852 where his father was a banker; when he first came to London he was attached as clerk to a large financial house, and subsequently started in business on his own account; he took an active part in placing the Egyptian position on a trustworthy basis, was largely concerned in the amalgamation of the great firm of Vickers, Sons, and Maxim, and is a director of the Swedish Central Railway Company and of many other important industrial enterprises."

For the purpose of carrying out the decision thus arrived at, His Majesty has appointed an Advisory Committee consisting of Sir William Broadbent, Sir Richard Douglas Powell, Sir Francis Laking, Sir Felix Semon, Sir Hermann Weber, and Dr. Theodore Williams, and as a first step towards the practical fulfilment of the scheme, a sum of £800 is offered in prizes for the best essays upon sanatoriums for the treatment of tubercular disease.

It is obviously the wish of the King that his sanatorium shall be as perfect as possible; fully equipped with all that is necessary for scientific research, and suitably arranged for the carrying out in detail of all the most recent and approved methods of treatment.

That this generous gift should thus be dedicated to the foundation of a medical institution, when no limit was put to the King's choice but that the money should be expended "for charitable or utilitarian purposes," adds one more to the many previous evidences we have had of His Majesty's untiring consideration for the health of his subjects, and cannot fail to afford particular pleasure to every medical man within his wide dominions.

Considerable attention has been recently directed to the therapeutic properties of supra-renal extract. It acts as a powerful stimulant to involuntary muscle, which it seems capable of affecting both directly and through the medium of the nervous system. Its principal physiological effects, so far recorded are, (1) elevation of blood pressure, secondary to constriction of the arterioles; (2) retardation of the pulse rate; (3) increased force of the cardiac systole; (4) blanching of tissues when applied locally. Until comparatively recently its use was restricted to cases of Addison's disease, in some of which its exhibition was attended with satisfactory results, but further investigation of its physiological effects has led to its adoption as a promising remedy in cases of dilatation of the heart, exophthalmic goitre, and cardiac failure. In experiments conducted by Mankowski, of St. Petersburg, it was found that 30 seconds after cessation and respiration and cardiac action from chloroform inhalations, an intravenous injection unfaillingly resulted in producing resuscitation. Its greatest successes so far, however, have been achieved from its local application. In epistaxis, metrorrhagia, and other forms of hæmorrhage from surfaces that can be reached it may be counted upon as a powerful astringent and hæmostatic. But in internal hæmorrhages, hæmatemesis, hæmoptysis, hæmaturia, etc., its administration by the mouth is credited with surprisingly successful results. When instilled into the eye it produces within one minute complete blanching of the ocular and partial blanching of the palpebral conjunctiva, and from a similar effect on other mucous membranes, it is recommended in cases of coryza, hay fever, tonsillitis, and other affections, attended with capillary congestion. Its ascertained properties suggest it as useful for careful trial as a hæmostatic. It may be given in tabloid form as a dried extract, but recently the active principle has been extracted in a pure form by Dr. Jokichi Takamine, and is now in the market under the name of "Adrenalin." It is a stable substance which occurs in the form of minute white crystals, has a slightly bitter taste, and is soluble sparingly in cold, but readily in hot water.

Considerable attention has recently been aroused by reports, mostly emanating from Paris, of surprising results achieved by various observers in the treatment of disease by electric currents of high potential and great frequency. The fact that the body may be painlessly charged with quantities of electricity enormously in excess of anything previously attempted, owes its discovery and recognition to the excellent work of Tesla in America, and of D'Arsonval in France.

These observers have found that currents of high frequency exert a powerful influence on respiratory combustion, so that their use is attended with a marked increase in the amount of oxygen absorbed, and of

carbonic acid given off; also that when the frequency of alternation has reached a limit of from twenty to thirty million undulations per second, both motor and sensory nerves are insensible to them. The principal effects claimed for them are (1) a marked influence on the vaso-motor system, causing a primary fall and subsequent increase of arterial tensions; (2) assimilative and nutritive changes with increased activity of skin; (3) a diminution in the amount of uric acid and an increase in the amount of urea excreted; (4) promotion of natural sleep and appetite; (5) restoration of vital energy; (6) attenuation of certain toxins and modification of the normal growth and behaviour of various micro-organisms. It is not yet accepted as an established fact that the painless currents actually penetrate the tissues, though there is much to warrant the belief that they do. If it be so, the body would become an electrolytic conductor, and as such would be subject to molecular and other changes similar to those which are always associated with the passage of the electric current through any kind of electrolyte. The application of this form of electricity is carried out according to various methods, both generally and locally, and with proper precautions is unattended with the least risk.

Its great usefulness has, so far, manifested itself in the treatment of hæmorrhoids, anal fissure, diabetes, arthritis, anæmia, and various superficial maladies of the skin. Certain claims have also been advanced in favour of its value in diseases associated with micro-organisms, especially phthisis, but the investigations are too recent and too few to justify great reliance on the results so far attained. It may be admitted that high frequency currents possess a distinctive influence over nutritional activity, and that they may ultimately prove to be the most valuable form of electricity as a therapeutic agent yet discovered, but the suggestive influence which their manifestations must exert upon neurotic patients must be borne in mind if their true value as a remedial agent is to be arrived at. Most other electrical methods have suffered from a too blind faith in their virtues, and it will be regrettable if this most recent development in the field of electro-therapeutics should similarly perish from the enthusiasm of its votaries.

We are at present suffering from a severe epidemic of cancer cures. The case of Lady Marsham to which regrettable notoriety was recently given by the London press was professedly published to extol the virtues of violet leaves as an infallible remedy. From America speedily comes the news that the value of violet leaf fomentations is as nothing compared with the efficacy of an old friend which has periodically been credited with marvellous powers in a long succession of diseases, namely sulphur. Various forms of electricity are being exploited vigorously, and whereas one set of believers pin unyielding faith to the Röntgen rays, another as confidently asserts that high frequency currents are about to supersede every previous method of treatment and are to prove the permanent panacea for the control of all forms of malignant disease. The publicity given to these and many other so called cures in the general press is most undesirable from every point of view.

As regards causation, the trend of professional opinion has lately been in the direction of supporting the theory which connects the admitted increase of cancer with a more luxurious way of living and particularly with the progressive dietetic preference of the western world for nitrogenous food which systems of cold storage and preservation by canning have within recent times brought so largely within the reach of all classes. As a deduction from this theory,

Dr. James Braithwaite has just published in the *Lancet* a paper advocating reasons for believing that probably excess of salt is the ultimate factor in the meat-eaters diet which is responsible for his greater susceptibility to the dreaded disease. Dr. Braithwaite does not claim to produce conclusive proofs of his theory, but the well-known prevalence of the disease in Switzerland where salt enters very largely into the daily regimen of the population is a suggestive fact in support of his contention.

In all probability the solution of the problem of curability, when found, will resolve itself into a question of prevention rather than cure. It is difficult to conceive how any methods other than surgical can cause the disappearance of such an active tissue growth as cancer once it has become fairly established.

The fixture card of the Medical Graduates' College in Chenies Street for the first term of 1902 has just been issued and again contains an attractive programme of practical work. During the absence of Mr. Jonathan Hutchinson, who has gone to South Africa to enquire into the causation of leprosy, the Thursday afternoon consultation will be conducted by Mr. W. H. A. Jacobson. The other clinics are arranged on much the same plan as formerly. Clinical lectures are promised by Dr. Halliday Croom of Edinburgh, Mr. Henry Power, Dr. Handfield Jones, Mr. Rushton Parker of Liverpool, and others.

This young institution is carrying on a very useful and much needed work, and requires only to be more widely known in order to have the facilities which it offers for post-graduate study more extensively taken advantage of. We learn from Captain Pinch, the medical superintendent, that there has been a larger attendance of Colonial and American practitioners during the autumn months of 1901 than at any other period since the foundation of the College, and that the general progress as regards attendance of members, supply of patients, etc., is one of slow but satisfactory improvement.

On the 1st of January the Post Office replaced our old postage stamps by a new series bearing the effigy of His Majesty the King. The *Lancet* has taken the trouble to inquire into the nature of the colouring matter used for distinguishing their different values. In the case of the penny issue, whose colour has reverted to the red with which we were for so long familiar, one of the innocuous anniline dyes, which is peculiarly resistant to atmospheric action and to moisture, has been used. The same is true of the half-penny, and no doubt of all the stamps of the series; in none of them could any trace of metallic or irritant poison be found. The adhesive material used is in all instances dextrin or British gum. In view of the fact that the large preponderance of stamps in use are rendered adhesive by the dirty but convenient practice of licking them, it is a matter of no small consequence to be thus assured that, so far at least as the manufacture of these daily necessities is concerned, every care has been taken to provide that the materials are clean and harmless. This, however, does not lessen the possibility of any stamp becoming a vehicle for septic or other infection. When, indeed, the kind of storage and manipulation to which postage stamps may be subjected is contemplated, the risk from the use of the tongue as a moistening agent becomes in these days of bacterial omnipresence, a danger of greater actuality than is generally recognised. This idea is most unpleasantly suggestive if it is applied to the hobby of stamp-collecting which, however interesting and instructive, puts into circulation old stamps from

all parts of the world; these pass through innumerable hands and various phases of ownership until eventually they find their way into our schools and families where they are freely handled, perhaps even "licked" for the tenth, twentieth, or hundredth time.

London, January 14th, 1902.

Scotland.

(FROM OUR OWN CORRESPONDENT.)

The Carnegie Bequest—The Edinburgh University and Royal Infirmary—The Edinburgh Australasian Club—Farewell Dinner to Professor Welsh.

THE Scottish Universities were brought prominently before the notice of the English-speaking world by Mr. Carnegie's great gift last year. A settled income of over £100,000 a year, half to go to the payment of class fees of needy students of Scotch parentage, and half to the furnishing of laboratory and teaching requisites, seemed a great windfall to the Scottish Universities. There have been many opinions of a widely different nature as to the effect this princely gift will have on them. So far no results are apparent, a large amount of fee money has been paid this winter, mostly to students who were already attending the Universities; the other part of the grant has not as yet been apportioned. It is not to be anticipated that the payment of fees will have much immediate effect on the number of students, the preliminary examination acts as a barrier to those who will profit most by the scheme, and some years must elapse before many candidates can present themselves who have not previously resolved on having a University education. The scheme makes no provision for a preliminary education, and this will prevent any great rush to take advantage of free University classes. The grant for laboratory expenses should bear fruit sooner; hitherto many departments have suffered severely from want of funds necessary to bring them up to modern requirements. In future this will be largely remedied, but the rapid progress made in scientific knowledge requires a great annual expenditure to keep the Universities abreast of the times. The medical schools, University and Extramural, will be chiefly benefitted, and Scottish medical education will be better enabled to maintain the high standard it has hitherto been justly credited with. The annual returns of Edinburgh University lately published are of more than usual interest this year. There are now 1,139 medical students as against 1,094 last year and 1,186 the year before. In the first year of study there are 220, against 237 last year, and 221 the year before; the number in the first year does not, however, indicate the full number of new students, as many come here who have already completed a year or more of study in colonial or other Universities. The number of medical students at the University has been steadily decreasing for several years; most other Universities have also shown a decrease, and the London Hospitals have had a marked falling-off with a few exceptions. It is hoped that the lowest limit has been reached, and Edinburgh at any rate shows an increase this year and will probably continue to do so.

The annual returns of the Edinburgh Royal Infirmary for the year ending October 1st last were recently issued. During the year 9,552 patients were treated, and there remained in the Infirmary 604 patients on October 1st. Owing to drainage works, one or other of the medical pavilions, comprising three wards, have been closed during the year. This, and the building of new pavilions for eye and ear patients, and alterations in the kitchen and other parts of the

Infirmary, have entailed a heavy expenditure above the ordinary. Apart from these the ordinary expenditure, including that for out-patient departments, where 33,238 were treated in the year, amounted to an average of £71 1s. 9d. per occupied bed. The Infirmary is fortunately well supported, and is one of the best-managed and most efficient in Great Britain.

At this season of the year Edinburgh medical circles are busily engaged. The University has entered on the second half of the winter session, and the approaching "Professionals" in March are beginning to feel unpleasantly near to many who intend to appear for examination then. Medical classes cease for a fortnight's welcome vacation during the Christmas and New Year weeks; the laboratories remain open most of the time, but with the exception of a few enthusiastic men who take the opportunity of getting some dissecting done in the anatomical rooms there are not many who remain to work.

The Australasian Club held its annual smoking concert in its rooms in Melbourne Place on December 19th, rather later than usual. The large billiard room was tastefully decorated with flags, but the Commonwealth flag was not there, though the committee tried their best to get one. The members of the club are for the most part medical students and graduates from Australia and New Zealand; older members settled in England often come in for the "smoker," and it makes a very pleasant reunion for Australasians in this part of the world. In the unavoidable absence of the President (Dr. Young), the chair was taken by Dr. Begg, of New Zealand. The evening was a great success, and the club "smoker" maintained its reputation of being one of the best socials in Edinburgh. Among the guests were many of the leading medical men of the city, Dr. Malcolm Morris of London, and Dr. Welsh, pathologist to the Royal Infirmary, the recently elected Professor of Pathology at Sydney University. Dr. Welsh's health was proposed by the Chairman, and was enthusiastically received. Dr. A. B. Timms, a prominent member of the club, came up from Birkenhead. He is playing centre three-quarter for Scotland next Saturday in their match with Wales. A. N. Fell, a New Zealander, is also representing Scotland as wing three-quarter; both men played in all three internationals for Scotland last year.

On January 10th a dinner was given to Dr. Welsh by his many friends in Edinburgh on the occasion of his departure to Sydney. Professor Greenfield, Professor of Pathology at the University, was in the chair, and there were present a large number of medical men and teachers, including Professors Schäfer, Chiene and Muir, Drs. Allan Jamieson, Milne Murray, Mr. Stiles, and many others. Dr. Welsh was University Assistant in Pathology and Lecturer on Pathological Bacteriology for some years before the new arrangements in the Pathological Department of the Royal Infirmary were made, and was the first to be appointed to the post of Pathologist to the Infirmary under the new conditions. Since then he has had the organisation of a new laboratory there, which is now doing splendid work. A man better fitted to conduct the Pathological department at Sydney University could not have been found. We all wish him success, and Australasians at any rate, and others besides, envy him his good fortune.

Edinburgh, January 15th, 1902.

Dr. Edward Figg, one of the oldest doctors in Victoria, recently died at Williamstown at the age of 87 years. He was the author of several theological, medical, and poetical works.

Queensland.

(FROM OUR OWN CORRESPONDENT).

The Lady Bowen Hospital.—Administration of Anæsthetics.—Insurance Fees.—Medical Defence.

A NOTICE with reference to the Lady Bowen Hospital, Brisbane, which appeared in the last issue of the *Gazette*, may convey a wrong impression. A resident surgeon, Dr. Eleanor Greenham, was appointed last July; Mrs. Doyle and Miss Doyle, who have rendered valuable service to the hospital during a period of nine years, have resigned, with a view to undertaking private practice, Miss Brown having succeeded them as matron. There has always been private accommodation for "country" patients, an arrangement which is not an unmixed blessing, since it involves a mixture of charity, and "the other thing" under the same roof and management. The hospital is further served by a staff of six honorary physicians, who take a month at a time in rotation. There are three classes of patients; (1) private patients who pay £5 5s. for a private room in addition to the fee of their own medical attendant (who must be a member of the honorary staff); (2) patients who pay £3, occupy a semi-private ward and receive the attention of the honorary staff if required; and (3) "ordinary" patients, who are expected to pay £1 1s. for a fortnight's residence and attendance. The committee of the hospital consists of ladies who, on medical points, consult the honorary staff, and to their credit it may be said, generally follow the advice given by them.

The position assumed by the Solicitor-General for Victoria with reference to the right method of administering chloroform would be more amusing were it less sad, but the medical profession should have by this time become inured to ignorant lay patronage and criticism. But that there is room for improvement in the broad question of anæsthetics there can be no doubt, and that there should be hospitals whose staffs do not include anæsthetists is a matter of surprise and regret. An experienced anæsthetist occasionally strikes a bad case, a case causing alarm or at least anxiety, and calling for special care and skill in the administration, but the more experienced a man is the less often do such cases occur in his practice. As must happen sometimes, such a case falls to the lot of a recently qualified man, who is not under experienced supervision, and the misfortune which is very likely to ensue is not so much his fault as that of the diploma-giving body which has authorised him to practice anæsthesia without having given him an opportunity of learning so important and everyday a branch of professional work, and also to the hospital authorities who place an anæsthetic apparatus into his unpractised hands.

Nothing has yet been heard in Queensland from the A.M.P. Society with reference to the reduction of fees for examination of insurance candidates. That such a suggestion should have come from them is surprising. There are some insurance companies that pay half a guinea for examinations of candidates who are assuring a small sum, and it would be difficult to alter the rates already existing in connection with these societies, the continuance of which are due to the quiescent manner in which the medical practitioners of Queensland have accustomed themselves to submit to impositions and encroachments. It is to be hoped, however, that the prosperous and popular A.M.P. Society will not persist in action which will tend to reduce it to the level of the second-rate and third-rate societies of a similar nature.

Though there may be differences of opinion with regard to the formation of an Australasian Medical Association, there can, one thinks, be only one opinion as to the desirability of union in reference to defence matters. At the present time, an advertisement is appearing in the lay press, calling for applications for the position of medical officers to the Rockhampton Associated Friendly Societies' Institute. So far as Queensland is concerned, such an advertisement can be met by the insertion of a notice asking intending applicants to communicate in the first instance with the secretary of the Queensland Branch of the British Medical Association or of the Medical Defence Society of Queensland. But the applications will come from medical men in the southern States who possibly know nothing of the conditions under which they will be expected to serve, or of the attitude of the profession in Rockhampton towards them. Such mistakes would be avoided were the Medical Defence Societies federated.

A section of the lay press in Brisbane has obtained a considerable amount of "copy" from Dr. Taylor's presidential address to the Queensland Branch. The City Ambulance Transport Brigade Hospital—a so-called hospital which is without a doctor and without medical control of any kind—and which is, moreover, subsidised by Government to the same degree as are legitimate hospitals, is also up in arms against the censures of the medical profession. Nor has the last been heard either of the Ambulance Brigade or of the Associated Friendly Societies' Medical Institute. Neither need, perhaps, be taken very seriously, but even small annoyances require a certain amount of attention. The large attendance at the recent meetings of the Branch is evidence, if evidence were needed, of the interest taken by members in questions of ethics. The adoption of the first resolution at the last meeting of the Branch (reported in another column) by a unanimous vote is very satisfactory, and should have the effect of showing the enterprising Medical Institute that the profession at large does not approve of its tactics. The second resolution was withdrawn in its original form, since it appeared to convey a mutual mistrust which does not exist among members of the Branch, its adoption being deferred until an occasion for it should be reported to the Branch. The fourth resolution, which depended upon the second, was also withdrawn. The third resolution was adopted with a verbal alteration made for the purpose of showing that it was not intended to be retrospective. It should be the endeavour of the Branch to insure, so far as possible, in the future that no medical man shall enter into an agreement with Institutes similar to that existing in Brisbane without clearly understanding the nature of the position which he will thereby take up.

ANISOMETROPIA.

(To the Editor of the Australasian Medical Gazette.)

SIR,—Your January issue, in referring to Dr. Duane's practice of giving each eye its correction in anisometropia as being an *unusual one*, is likely to give members of the profession a false impression of the refraction work of ophthalmic surgeons. Dr. Kent-Hughes, in your February issue, has corrected this for Mr. F. B. Archer and himself—I should like to correct it for every ophthalmic surgeon worthy of the name. It is inconceivable that any oculist who takes his refraction work seriously would do other than correct each eye in prescribing for anisometropia. Since going into practice in 1885, I have never done anything else.

It never occurred to me to do otherwise; and I cannot recollect any one of my teachers so slipshod in his work as to have suggested it.

One can, of course, confirm the observations of Dr. Duane regarding the often great difference in the refraction of the two eyes, the frequent obtaining of great relief and of binocular vision after careful correction for constant wear, and the recognised fact that small differences between the two eyes often give rise to more suffering than great differences. Parallel to this last is the fact that small errors of refraction are answerable for more headaches than large ones. Dr. Duane himself, does not appear to me to claim in his excellent paper the originality attributed to him by your periscopeist.

Yours faithfully,
J. LOCKHART GIBSON.

Brisbane,
25th February, 1902.

[The above caustic criticism from so well-known, and able an ophthalmic surgeon, and so fair-minded a man as Dr. Gibson, is puzzling. The writer is quite content to adhere to his statements and opinion, for he is in good company. Were it not manifestly otherwise, he would like to think that the explanation of Dr. Gibson's letter might lie in his misapprehension of the sense in which the word anisometropia was, and is generally, used. Of course, slight differences in each eye (up to about 1.5D.), are always separately corrected. But the paragraph in the *Gazette* referred to cases up to 11D. Moreover, Dr. Gibson has read the original article, in which Duane clearly states that he has "for the most part, included only such cases as showed a difference of at least 2D." The term, anisometropia, is not generally applied to slight differences, or nearly all cases of ametropia would be included under that head. The whole point of Duane's paper is that he gives each eye its own correction in inequality of high degree. Dr. Gibson says that in 17 years he has never done anything else than correct each eye in anisometropia (he must include a large number of cases of high degree), and in most emphatic and unmistakable language, he says that this is the only recognised practice. Well, Donders, Landolt, Fuchs, Swansy, Norris and Oliver, Meyer, Fick, Roosa, Nettleship, Brudenell Carter, and, in fact, every accessible authority say it is *not*, and funnily enough, so does Dr. Duane himself in the paper referred to. Dr. Gibson can surely not have read very carefully this paper, of which he so highly approves, for the opening paragraph begins: "There is still such considerable difference of opinion with regard to the management of cases of anisometropia that there seems little reason to apologise for offering my personal experience in the matter. I am the rather led to offer mine, because it seems to differ more or less from that of others who have written upon the subject, and particularly because it runs counter to the statements contained in many of the text books." So it appears that Dr. Duane does claim that his practice is not the usual one. ("Originality" was not attributed to him). It is unnecessary to quote all the above-mentioned authorities. Two will suffice. Fuchs says (Text Book of Ophthalmology): "The obvious course to pursue would seem to be to correct the anisometropia by ordering different glasses for the two eyes. Nevertheless, this measure, in most cases, proves impracticable. . . . We therefore prefer, in anisometropia, either to give the same glasses for both eyes, or to correct one eye, and place a plane glass before the other." Swansy says: "When the difference is considerable it is often impossible to correct both eyes. . . . We must then be content

with correction of the least ametropic eye, or of that which has the best vision, or we may particularly correct the most ametropic, and fully correct the least ametropic." All the other authorities say practically the same thing. Surely these men are "worthy of the name of ophthalmic surgeons," and "take their refraction work seriously," and do not teach in a "slipshod" way. With Dr. Gibson's *practice* in these cases the writer, in general, agrees, and has followed it himself for some years with good results in many cases. He was gratified to find Duane and Dr. Kent-Hughes endorsing it, and is also pleased to find Dr. Gibson also believes in it. When, however, Dr. Gibson says that this is the usual course in all cases of anisometropia, he cannot follow him, when Duane himself, all the available text books, and his own ophthalmic acquaintances, say it is not.—PERISCOPIST.]

MEDICO-LEGAL.

Employers' Liability for Contracting Infectious Diseases.—On January 29th, at Sydney, in Chambers, Mr. Justice Stephen considered an application on behalf of William A. Kennedy for leave to proceed against the Australian Drug Co., Ltd., under the provisions of the Employers' Liability Act. He was a glass-blower, and his work required him to blow through a glass tube, which was handed from workman to workman. He contracted a certain disease, which manifested itself in the form of a sore near the mouth. It was alleged that three or four cases of the same sort had occurred in the works, and his legal advisers claimed that the plant of the company was defective in that the glass tube had not been kept in a sanitary condition, and this negligence had caused the injury. The judge decided that the application could not be granted, as the notice of intention to proceed should have been given within six months after the injury had been sustained. The second case, heard on February 5th, was brought by Robert G. Kennedy, an apprentice. For the defendants it was urged that sec. 3 of the Employers' Liability Act did not apply to apprentices. The judge held that this contention was sound, and application was refused, with costs.

Sydney Metropolitan Medical Association.

At a meeting of this Association held on March 17th, a resolution was passed that this Association should nominate one medical practitioner engaged in Lodge practice as their representative on the Council of the New South Wales Branch of the British Medical Association, and that the Western Suburbs Medical Association be asked to nominate one representative instead of two, as heretofore. A ballot was taken, and resulted in the selection of Dr. E. H. Binney as the nominee.

An Unfortunate Experience.—A correspondent writes informing us he has had an unpleasant and unprofitable experience through taking charge of a country hospital in New South Wales, and he would caution his confrères against entering into a similar contract. He signed an agreement for twelve months, and found there was little or no private practice to be obtained in the neighbourhood, and consequently the salary paid by the hospital authorities was insufficient. He complains also that "encouragement" was given to two unqualified men, one of whom was elected to the committee. Such an experience, unfortunately, is not uncommon, and we can but advise medical men to inquire carefully into the circumstances and surroundings of any such an appointment before binding themselves by signing an agreement.

REVIEW OF CURRENT MEDICAL LITERATURE.

SURGERY.

A Case of Pneumococcal Suppurating Pericarditis, treated by Incision and Drainage: Guy's Hospital with signs of lobar pneumonia at the right base, six days after commencement of illness. The following day there was slight increase of præcordial dulness, and this gradually increased, till, at the end of ten days, it reached the first intercostal space above, one inch to the right of border of sternum, and on the left, two inches outside nipple line. There was at first a soft "to and fro" bruit at the apex, and the sounds became more muffled. The temperature ranged from 98° to 101° F. The signs at the base were disappearing. The upper portion of the epigastrium became more prominent and was very tender on pressure. The cough again became frequent and severe, and the pulse and respiration rate had increased. As the boy was becoming visibly thinner, and was eating and sleeping badly, it was decided to explore the pericardium. A needle was inserted in the fourth left space, about one inch from the margin of the sternum, and thick yellow pus was withdrawn. A few hours later the pericardium was opened under A.C.E. through an incision over the fifth costal cartilage. The perichondrium was stripped off, and about one inch of the cartilage removed. No pleura came into view, but the pericardium was easily seen and incised. About eight ounces of thick pus were evacuated; a short thick drainage-tube was inserted and dressings applied. The operation only occupied a few minutes. A large quantity of pus drained away during the first twenty-four hours, but gradually lessened, so that after the fifth day very little came away. An attempt was made to keep the boy on his face, to assist drainage, but had to be abandoned. The child's general condition improved very much during the first ten days, his cough became less troublesome, his pulse stronger, and he ate and slept much better. A localised empyema was found on the right side, which was opened and drained fourteen days after the first operation. The child again improved for a while, but died five days later, or nineteen days after the pericardium was opened. The authors state that the *post-mortem* examination clearly demonstrated that the proper treatment was adopted, as the pericardial sac, which must have held about ten ounces of pus at first, had become practically obliterated. A reference is given to a paper by C. B. Porter (*Annals of Surgery*, December, 1900) giving 51 cases, or with the present 52, of which 20 recovered and 32 died.

John Fawcett, M.D., and F. J. Steward, M.S., record the above (*Clinical Society's Transactions*, Vol. xxxiv., 1901). The patient, a boy of eight, was admitted to Guy's Hospital with signs of lobar pneumonia at the right base, six days after commencement of illness. The following day there was slight increase of præcordial dulness, and this gradually increased, till, at the end of ten days, it reached the first intercostal space above, one inch to the right of border of sternum, and on the left, two inches outside nipple line. There was at first a soft "to and fro" bruit at the apex, and the sounds became more muffled. The temperature ranged from 98° to 101° F. The signs at the base were disappearing. The upper portion of the epigastrium became more prominent and was very tender on pressure. The cough again became frequent and severe, and the pulse and respiration rate had increased. As the boy was becoming visibly thinner, and was eating and sleeping badly, it was decided to explore the pericardium. A needle was inserted in the fourth left space, about one inch from the margin of the sternum, and thick yellow pus was withdrawn. A few hours later the pericardium was opened under A.C.E. through an incision over the fifth costal cartilage. The perichondrium was stripped off, and about one inch of the cartilage removed. No pleura came into view, but the pericardium was easily seen and incised. About eight ounces of thick pus were evacuated; a short thick drainage-tube was inserted and dressings applied. The operation only occupied a few minutes. A large quantity of pus drained away during the first twenty-four hours, but gradually lessened, so that after the fifth day very little came away. An attempt was made to keep the boy on his face, to assist drainage, but had to be abandoned. The child's general condition improved very much during the first ten days, his cough became less troublesome, his pulse stronger, and he ate and slept much better. A localised empyema was found on the right side, which was opened and drained fourteen days after the first operation. The child again improved for a while, but died five days later, or nineteen days after the pericardium was opened. The authors state that the *post-mortem* examination clearly demonstrated that the proper treatment was adopted, as the pericardial sac, which must have held about ten ounces of pus at first, had become practically obliterated. A reference is given to a paper by C. B. Porter (*Annals of Surgery*, December, 1900) giving 51 cases, or with the present 52, of which 20 recovered and 32 died.

Traumatic Subdural Hæmorrhage, Occasioning Convulsions on the Sixth Day after Injury, and Successfully Treated by Operation.

Raymond Johnson, B.S., and J. Risien Russell, M.D. (*Clinical Society's Transactions*, Vol. xxxiv., 1901) record the above case. The patient, a porter *et. 33*, was admitted to University College Hospital October 23rd, 1901, suffering from frequently recurring

convulsions, affecting chiefly the left side of the body. Six days previously he fell whilst carrying a sack of potatoes down a flight of stone steps, and was found unconscious at the bottom of the steps, bleeding slightly from a scalp wound on the left side of the head. He was slightly under the influence of drink. He was got to bed, and remained unconscious till the next morning, when he woke up and walked to see a doctor. He complained of headache and of being shaken by the fall. He remained away from his work for five days, but apparently without any definite symptoms until 10 o'clock the night before admission, when he had a fit, and continued to have rapidly repeated fits until he was admitted to the Hospital. On admission he was bathed in perspiration, temperature 102° F., pulse 100. Each fit lasted from two to four minutes, with an interval of from one to five minutes, and the mode of onset was either the turning of the eyes to the left, or twitching of the left side of the face. The clonic spasms rapidly involved the whole of the left side of the body and the right leg. During the fits the patient sweated profusely, and was deeply cyanosed. In the intervals he could usually answer questions. Pupils equal, of medium size, and reacted normally. The left arm was distinctly weaker and more flaccid than the right. The arm-jerks were present on the left side but not on the right. On the left side there was exaggeration of the knee-jerk with ankle clonus, and the extensor response was obtained as the plantar reflex. Chloroform was administered for half-an-hour on two occasions, and checked the fits each time, but they returned as soon as it was stopped.

A full dose of chloral and bromide was administered per rectum. In arriving at a diagnosis uræmia was quickly excluded. Epilepsy, however, caused more serious consideration, as the father and brother had both suffered from it; but as many of the fits began by twitching of the left side of the face, and others by movements of the left hand, this mode of onset, coupled with the state of the reflexes, and the paresis of the left arm before mentioned, was regarded as indicating the existence of a definite irritation of the right cerebral hemisphere. The evidence did not justify the diagnosis of a focal lesion, as the fits did not constantly begin in the same region. The late onset of the fits also seemed to negative the presence of a clot of blood, so that the recorders were forced to the conclusion that the lesion was probably inflammatory in nature. It was decided to expose the right hemisphere over the middle of the Rolandic area. On removing a disc of bone with an inch trephine, the dura mater was found to bulge slightly, and to present a bluish tint. On incising the dura a small quantity of thick dark blood escaped. The opening in the skull was enlarged upwards and downwards with bone forceps, and the opening in the dura opened in a crucial manner to the full extent of the bone opening. In all, between two and three drachms of blood escaped. The surface of the brain presented a perfectly normal appearance. The divided dura was turned into position, and the scalp incision sutured. No bone was replaced. No fits occurred after the operation. Considerable weakness of the left side, especially of the arm, followed, and it was nearly a month before the arm had fully recovered its strength. The extensor response on the left side was present for four days after the operation, and the right pupil was larger than the left for six days. The temperature rose to 105° four hours after the operation, and for four days varied between 101.4° and 104°, and after the sixth day was normal. The patient left the hospital on the 34th day in perfect health.

Ano-Rectal Transplantation.

RUSHMORE, of Brooklyn (*Annals of Surgery*, December, 1901), briefly relates a case of the above, where very satisfactory results were obtained. The patient, a male aged 39, had five months before, while bending over his work, been gored in the rectum by a bullock, which caused a lacerated wound through the sphincter, and both backward and forward into the perineum. The loss of blood was sufficient to weaken him. Several operations had been performed in New York, Boston and Chicago, but without any material relief. He had no control over the sphincter, and was consequently always in a filthy state, and unable to work. The sphincter manifested no contractile power whatever on inserting the finger into the rectum, nor could the patient by any voluntary effort cause it to contract in the slightest degree. Inguinal colotomy and ano-rectal transplantation were the only two methods of treatment likely to do good. As it was desired to restore the man to a condition fit for active work, the latter operation was decided upon, after explaining to him its experimental character. With the patient on his side, under ether, an incision was made extending from about a quarter of an inch outside the anus following the natal cleft to the sacro-coccygeal articulation. The coccyx was removed and the rectum, including its middle and lower third, freed from the surrounding soft parts posteriorly and laterally, and the hæmorrhage checked by torsion. The patient was then put in the lithotomy position, and with an assistant holding a sound in the urethra, the anterior portion of the rectum was separated by means of scissors well up to Douglas' cul-de-sac. The anal end of the rectum was then anchored in the upper angle of the wound, just below the sacrum, by means of black silk sutures. The wound below the upturned rectum was then irrigated and stitched. The result of the operation was a rectal pouch, the bottom of which was about three inches below the transplanted anus, and the posterior wall of the rectum was folded back on itself and formed a thick valve just inside the anus. The operation was followed by a good deal of pain for a few days, and some suppuration, but the ultimate result was very good, the patient gaining strength and weight, and was able to resume work.

Pylorectomy performed in two stages.

GORDON (*Medical Press and Circular*, January, 1902) reports a successful case of pylorectomy performed in two stages. The patient, a man aged 43, had suffered from vague gastric symptoms for about 20 months. The pain was never severe, nor was vomiting constant. He had lost 21 lb. in weight during the last four months.

A tumour was to be felt in the abdomen, just above the umbilicus; it measured about three inches in transverse diameter, was hard and irregular, and could be felt to move readily with respiration. It could be moved freely in all directions. There was no liver enlargement; and this, together with the remarkable mobility of the tumour led to the hope that there was an absence of adhesions and of secondary cancer deposits. An incision was made slightly to the left of the middle line. A hasty examination of the tumour justified the hope that had been entertained. The transverse colon was turned upward and posterior gastro-enterostomy performed. The opening in the stomach was made as far to the left as possible, after the method of Roux. The jejunum was divided some distance from the duodenal flexure, the lower end was fixed to the stomach opening, and the upper end was made to anastomose with the jejunum again some four inches or more from the stomach junction. Simple

suturing was used throughout. The abdomen was then closed. The course of the case was satisfactory; there was little or no shock, and the patient only vomited once. By the ninth day he was able to take solid food. Twenty-five days after the gastro-enterostomy the abdomen was again opened in the middle line by an incision five inches long. When the stomach region was exposed, an opening was made in the lesser omentum in order to explore the posterior aspect of the tumour. A Doyen's clamp was placed across the duodenum, which was cut across, and the end at once sewn up by a double row of silk sutures. The stomach was then cut across between clamps placed well beyond the apparent limits of the growth, and the opening closed up by a double row of silk sutures.

There was very little loss of blood during the operation, which lasted one and three-quarters of an hour. The excised portion of stomach showed a considerable narrowing of the pylorus by a growth which proved to be a columnar celled cancer. The patient's condition for some days after the operation was a precarious one. His temperature went to 102° F. and his pulse to 160 on one occasion. On the fourth day a free discharge of bilious fluid occurred from the bottom of the first incision; but the general condition of the patient improved. At the end of the first week a considerable increase in the nourishment was risked, and it was found that he could take four pints of peptonised milk in the day without any discomfort. Steady improvement took place, and the patient gained 12 lb. in weight in four months.

The author in his remarks discusses the question "Is pylorectomy under any circumstance legitimate?" and comes to the conclusion that it is, provided the operation can be performed early. He briefly summarises as follows:—

1. The present position of pylorectomy is unsatisfactory, but there is no cause for despair.
2. That an advance may be made, it is, in the first instance, necessary to *reduce the immediate mortality*. This is to be done by (a) a more careful selection of cases, and (b) by performing the operation in two stages. In the second place it is necessary to *obtain better ultimate results*. The way to this end lies in (c) wider resections, and (d) in this case also in better selection of cases.
3. Let these things be accomplished and we may then, with more justice than at present, call upon physicians to resort more frequently to exploratory operation.

THERAPEUTICS.

The Treatment of Cardiac Dilatation and Asthenia.

Burney Yeo (*Practitioner*, January, 1902), points out that there are three manifest causes which have been at work in recent years in giving rise to the prevailing tendency to cardiac asthenia and dilatation, (1) the influenza epidemic; (2) abuse of muscular exercises; (3) excessive use of tobacco. The two last differ from the first in being entirely preventable. The incidence of influenza is, of course, to a great extent unavoidable, but in dealing with the period of convalescence after this disease, sufficient stress has not been laid on the necessity of a prolonged period of physical rest; for, while it may be altogether advantageous for the patient to be much in the fresh air, active physical exercise should certainly be forbidden. Physical exercise has its place and season in the treatment of cardiac debility, but it is often applied

out of place and season. Physical rest in bed has ever been, and ever will be, the surest of all cardiac tonics in serious cases of cardiac dilatation and asthenia, and this is the most essential remedy in the early periods of commencing dilatation. When exercise becomes desirable and necessary, gentle carriage exercise is of real value, and also horse exercise for those who are accustomed to it. The author has found the use of saline baths containing carbonic acid at temperatures from 88° to 93° F. beneficial in cases of chronic cardiac asthenia and dilatation following upon acute disease, and also in nervous persons with dilatation from strain and over-exertion, mental and physical. With regard to general considerations as to the appropriate treatment of cases of cardiac dilatation, in the first place the patient must be withdrawn from the influence of all those conditions which have caused it. If it has been due to over-exertion, then there must be avoidance of all kinds of muscular effort and only gentle exercise allowed. If it has been induced by over-excitement, either mental or emotional, or addiction to evil habits, these causes must be sought out and corrected. An open-air life in the country, or at the sea-side, gentle exercise, a nourishing but light and digestible diet, regular action of the bowels, and early retirement to bed are all very obvious but necessary remedial measures. Some form of cardiac tonic is generally indispensable in these cases, specially in those which follow attacks of acute febrile and septic diseases, and also in anæmic conditions. If there be much dyspnoea and troublesome palpitation, small doses of digitalis with iron may be given, but the author prefers to employ strophanthus, or strychnine, with coca, in combination with iron, quinine, or arsenic, as may seem desirable. In purely anæmic cases, iron and nux vomica with some aperient will be most appropriate. In cases of acute dilatation, however induced, the hypodermic injection of strychnine in doses of $\frac{1}{16}$ th to $\frac{1}{8}$ th of a grain will often be attended with remarkably good results. Free action of the bowels is very advantageous in nearly all cases of cardiac dilatation and feebleness, but aperients must be so given as to clear away only the residue of digestion. For this purpose the best method is to give an aloetic pill after dinner or at bedtime, and a saline dose early in the morning, about an hour before breakfast.

Suprarenal Extract in Cardiac Conditions.

Deeks (*Montreal Medical Journal*, November, 1901), gives the history of two cases in which he used the suprarenal extract with good results. The first case was a female patient, eighty-two years of age, suffering from the symptoms of dilatation of the heart. The cardiac action was weak and irregular, the legs much swollen, the œdema persisting in spite of rest in bed. The diagnosis was myocarditis, mitral incompetence and arterio-sclerosis. All the usual remedies had been tried with no benefit. Vomiting set in, and the patient's condition became extremely serious. Suprarenal extract in three-grain doses was ordered, and from the first day a marvellous improvement was observed. The vomiting ceased, the swelling disappeared, and the patient was soon able to walk. The heart's action became regular, and the patient was better than she had been at any time during the preceding three years. She took from nine to eighteen grains of the extract each day. The second case was a man seventy-six years of age, with œdema of the legs, heart regular but rapid, with weakness of the first sound. Under the use of suprarenal extract, the œdema entirely disappeared in six weeks, and the

heart's action much improved. In both of these cases the extract had only been given as a last resource, the usual cardiac tonics having failed to effect any improvement. These results are somewhat remarkable, in view of the known action of this remedy in raising arterial blood pressure, since with a weakened myocardium and degenerate vessels one would rather have expected unfavourable results—either a rupture of the blood-vessels, or fatal syncope from over-strain of the cardiac musculature.

Crocotal in Pneumonia.

Leonard Weber (*New York Medical Record*, November 2nd, 1901), relates his experience with this remedy in the treatment of nine cases of pneumonia, both lobar and lobular. The ages of the patients ranged from twenty to forty-seven years. The oldest patient died from cardiac degeneration, but all the others recovered. The course of the disease so treated shows that this drug exercises a remarkably beneficial and uniform influence. There were no symptoms of depression or disturbance of the gastro-intestinal tract. As soon as the patient came under the full influence of the drug the temperature fell, and the same improvement ensued as usually supervenes at the onset of the crisis. It is doubtful if the drug exercises any direct curative effect on the disease. The author administered the remedy in capsules containing ten minims six times a day, in some cases for eight days.

The Clinical Uses of Citrophen.

Syers (*Treatment*, January, 1902), relates his experience of the use of citrophen in various conditions. He has found it of great service in the treatment of the headache of anæmic girls. In most cases one ten-grain dose has been followed by a relief of the pain, and, as a rule, two or three doses of the same amount have cured the headache for the time being. No unpleasant symptoms have ensued. In migraine, it has seldom failed to give relief and frequently has cut short the attack. In neuralgia, generally the relief has been only temporary, and no permanent cure of this condition has been observed by the author. But he has obtained excellent results in the relief of the various aches and pains so frequently met with in neurasthenics. In lumbago and sciatica 15-grain doses given every three hours up to three doses have nearly always proved beneficial in removing the pain, at any rate, for the time being. In chronic articular rheumatism a dose of ten grains given night and morning has relieved the pain when other remedies have all failed. The author also has found it useful in the severe head pains at night in patients suffering from syphilis. In febrile diseases citrophen is certainly useful; in some cases of pleurisy in which the pain was very severe it was greatly relieved or entirely removed by a few 10-grain doses. On the other hand, the author has not found it to be of much service in reducing temperature—neither in acute rheumatism nor in pulmonary inflammations, acute or chronic—has the author's experience proved it to be superior to other remedies. Nevertheless, the very marked power of relieving pain in many and various morbid conditions which citrophen undoubtedly possesses renders it a valuable addition to the list of drugs in ordinary daily use. It is pleasant to take, and can be administered in effervescent waters. It has no depressing or deleterious effect, and the author has never observed the slightest ill effect as the result of its use.

DISEASES OF THE EAR, NOSE AND THROAT.

Depressed Nose treated by Gersuny's Method.

Scanes Spicer (*Journal of Laryngology*, January, 1902) reports a case treated by this method. The only disadvantage that followed was that some of the paraffin worked its way into the upper eyelid. The technique for inserting the paraffin into the nose was rather troublesome. He used just such a small syringe as used to be used for tuberculin injections. He heated the paraffin in a water bath, and had the patient standing near. The paraffin used melted at 105° or 106° F., and was sterilised. It was a mixture of lard and soft paraffin. Having sterilised the skin with alcohol and sublimate solution, he injected three or four syringefuls of the paraffin into the subcutaneous tissue over the nasal bridge, and moulded the mass up with the fingers to the shape of a normal nose. The point of injection was sealed with collodion, and in future he would inject only a small amount of it at one time, and repeated as necessary, and he would press down the skin at the root of the nose on to the subjacent tissues so that nothing could escape. The paraffin had been *in situ* six or seven months, and it was really wonderful how well it filled up the depression which had previously existed in the bridge.

Bacteriology of the Nose.

Iglauer (*Laryngoscope*, November, 1901) concludes that the weight of evidence is strongly to the effect that the normal nasal mucus contains bacteria. Among other organisms he found the staphylococcus pyogenes, aureus and albus, the diplococcus pneumoniae, and even the streptococcus pyogenes. He believes, however, that the nasal mucus is not a good culture medium, and that the organisms which have lodged in the nose, are expelled by the ciliated epithelium with great rapidity. He sums up as follows. (1) It is advisable to sterilise the vestibule of the nose before operating. (2) After operations, the nostril on the operated side should be closed with a piece of cotton to act as a filter. (3) Plugging of the nasal cavity after operation, is as a rule inadvisable, as it tends to retain the nasal secretions. (4) Nasal wounds do not heal by first intention owing to the presence of bacteria. (5) Fever after operations, and the few deaths recorded have probably been due to the presence of pathogenic micro-organisms in the nose.

The Use and Abuse of the Nasal Spray.

Roy (*Atlanta Journal*, October, 1901) asserts that the abuse of sprays consists in, first, the improper use of spray solutions. The indiscriminate use of different substances in an atomiser without due reference to their suitability to the given case is a most egregious error. Such practice frequently does harm to the nasal mucous membrane. Many rhinologists condemn the use of nasal sprays altogether. In Germany one rarely ever sees a nasal spray used. The second abuse of sprays is the frequency of their use. The popular use of late of the menthol oily spray is largely responsible for this error. While menthol is a valuable nasal therapeutic, yet the harm it has done to nasal mucous membranes far outweighs the good. The cooling sensation produced is most refreshing to the patient and like cocaine seems to open up the stuffy nasal passages; but experience shows that a reaction of dryness is sure to follow its prolonged use, and this needs a more frequent application to overcome this subjective sensation. The third abuse consists in the force of the spray. This applied more particularly when compressed

air is used. A compression of 15 pounds is quite sufficient force with which to throw liquids into the nasal cavities. A force greater than 20 pounds always causes an abrasion of the mucous membrane, especially if watery solutions be used. The author has never seen a case which required a spray of cocaine, and considers it criminal to spray a solution of it into the nose especially if it be a chronic case. He always applies cocaine by means of cotton on the end of an applicator, thus limiting its action to the desired portion.

Are the Tonsils Normal Physiological Organs?

Bosworth (*Medical Record*, January 11th, 1902) is disposed to think they are not. He finds it difficult to understand why nature should place these sponge-like bodies in a normal throat, and believes that a far better and clearer understanding of clinical indications would be to regard this mass with its lacunar traps as a diseased body. He thinks this teaching is notably emphasised by the numberless observations published in the last few years of the different germs found lodged in these filtering lacunae. Twenty years ago, at a meeting in London, he made the observation that practically there are no tonsils in a healthy throat. This observation was received with contemptuous jeers. After twenty years of additional clinical observation, he is disposed to repeat the same remark, believing that if this view were more generally accepted it would remove many supposed objections to operating on the tonsils. Instances are quoted of tonsils having been removed and the throat left in a worse condition than before, and in cases of this kind which he has met the subsequent symptoms were either due to some other cause or the morbid tissue had been only partially removed. He emphasises the necessity for thorough extirpation, believing that a partial removal occasionally leaves the throat in as bad, if not a worse, condition than before operation. With regard to the operation itself, he states that for the last ten years he has ceased entirely to cut tonsils with a tonsillotome. No tonsillotome has ever been devised which will remove the tonsil in its entirety. He uses the cold-wire snare, and finds that it has the additional advantage of obviating the possibility of hæmorrhage in the adult.

Blindness due to Empyema of Accessory Sinuses.

T. H. Halsted (*Laryngoscope*, November, 1902) reports the case of woman of 45 years of age, who on awakening, had found herself totally blind in the left eye. Examination showed swelling of the sheath of the left optic nerve, enlarged and tortuous veins and quantitative perception of light only. For two years she had had nasal catarrh, and some months previously had had an acute exacerbation characterised by a constant and free discharge of odorous pus from the right nostril. The left pupil was widely dilated, and there was exophthalmos. From the signs present, a diagnosis of empyema of the right antrum, right ethmoidal and sphenoidal sinuses, with rupture and probable pressure on the optic nerve. Two operations were performed, and in six weeks she was entirely free from headache and insomnia, and could read ordinary type with the left eye.

MESSRS. C. J. HEWLETT & SONS' PREPARATIONS.—We have received from Messrs. Hewlett & Sons samples of their Liq. Ergotæ Purif., and of their Antiseptic Emollient Cream. The former is an admirable preparation of ergot, and can be relied upon in all cases where the administration of ergot is indicated. The emollient cream consists of oleate of zinc and boracic acid combined with lanoline, perfumed with attar of roses.

PUBLIC HEALTH.

New South Wales.

The Plague.—Last week there were seven cases and two deaths; the previous week there were seventeen cases and five deaths; the week before that saw nine cases and four deaths recorded. Up to the present there have been sixty-three cases and seventeen deaths. At the Coast Hospital on Saturday, thirty-two patients remained under treatment, while four have been discharged as cured. From March 1st to March 7th, the total number of rats taken to the depôts established by the Board of Health was 4,419. Including the number destroyed by the men fumigating coastal vessels, and the sewers, quite 7,000 must have been accounted for, in addition to many thousands more killed by residents in Wednesday's rat crusade, of which no record will ever be obtainable.

Vital Statistics of the Metropolis.—During the month of January, 1902, 1,183 children were born, being 96 more than the average for January during the previous five years. The deaths during the month numbered 508, or 1 greater than the quinquennial average for January. The birth rate was 2.25 per 1,000 of population, and the deaths were 1.01 per 1,000. The deaths under 1 year, compared with the births for the month, the rate being 181 per 1,000. Of the 508 deaths, 300 or 59 per cent. were under 5 years of age, and 148 or 29 per cent. were less than 1 year old.

Zymotic diseases caused 70 deaths; the main causes were: whooping-cough, 21; diarrhoea, 12; typhoid fever, 13; and 1, bubonic plague. The returns of the Department of Public Health show that 87 cases of typhoid fever and 45 cases of diphtheria were notified during the month.

From constitutional disease there were 86 deaths, the main causes being phthisis 35, cancer 30.

Developmental diseases produced 43 deaths, premature births being responsible for 20 cases, and senile decay for 15.

Local diseases caused 253 deaths of the subdivision of this class. Diseases of the nervous system contributed 49 deaths, the circulatory system 57, of the respiratory system 88 (pneumonia 16 and bronchitis 12), of the digestive system 74 (enteritis 50), of the urinary system 27 (Bright's disease 20).

Newcastle Vital Statistics.—During the year there were 1,738 births in the Newcastle District, or 31.51 per cent. of the population. The deaths for the same period numbered 742, or 13.45 per cent. Of these, 273, or 37 per cent., were under 5 years of age, and 202, or 27 per cent., were less than 1 year.

Zymotic diseases caused 86 deaths or 12 per cent.—typhoid 26, whooping cough 17, influenza 12.

Constitutional diseases caused 116 deaths, or 16 per cent. (phthisis 46, cancer 32, tabes mesenterica 18). The deaths from phthisis comprise 6 per cent. of all deaths.

Developmental diseases produced 60 deaths, or 8 per cent. of the roll, premature births being responsible for 35 cases and senile decay for 16.

Local diseases caused 379 deaths, or 51 per cent. Apoplexy 28, convulsions 11, inflammation of the brain 10, epilepsy 9, of the circulatory system 64 (endocarditis 21, heart disease 19, syncope 9), of the digestive system 88 (enteritis 49), of the urinary

system 37 (Bright's disease 25), of the respiratory system 94 deaths (55 above 5 years of age, 39 below), the chief complaints being pneumonia 62, bronchitis 19. The deaths from pneumonia comprise 8 per cent. of all deaths.

In the report of the vital statistics of the Newcastle district for the month of January, 1902. The births during the month were 175, or at the rate of 3.14 per 1,000 of the population. The deaths numbered 62, or 1.11 per 1,000. Of the deaths 30 were due to local diseases, 11 to developmental diseases, 6 to zymotic diseases, and 5 to constitutional diseases.

Victoria.

Vital Statistics.—The return for the month of January, 1902, in the district of Greater Melbourne states that 948 births were registered, and the deaths 661, excess of births over deaths being 287. The births for the period mentioned was the lowest recorded for the last 11 years except 1899, and 149 below the average of the month during the previous 10 years, or 211 below it if allowance be made for the increase of population. Children under 5 years of age contributed 37 per cent. to the mortality. The deaths of infants under twelve months numbered 205. Of the deaths, 77 occurred from zymotic (whooping cough), 17 diseases, 123 from constitutional diseases, 349 from local diseases.

Typhoid Fever.—Cases of typhoid fever continue to be reported in excess of the number recorded last summer. The return presented to the Board of Public Health showed:—Cases reported for the fortnight ended 15th February: For the whole State for 1901, 127 cases and 4 deaths; for 1902, 190 cases and 14 deaths; for metropolitan area, for 1901, 65 cases and 8 deaths; for 1902, 83 cases and 8 deaths. The returns show a slight increase of diphtheria, and a slight decrease of scarlet fever.

Bubonic Plague.—The Chairman of the Board of Health, Melbourne, on being called to examine the case of a wharf labourer who was taken ill on 1st March pronounced the patient to be suffering from bubonic plague. It was proved that the man had been recently at work unloading cargo from the hold of the steamer "Coolgardie," which had lately arrived in port from Sydney, the cargo containing a quantity of superphosphate, a commodity in which rats fairly revel. The house in which the patient resided was promptly quarantined, and the man was taken to Goode Island Sanatorium for treatment.

Queensland.

Bubonic Plague.—Total number of Cases from January 27th to February 24th, 1902—11; Total number of deaths, 4; discharged, recovered, 1; Remaining under treatment, February 24th, 6. Report ending 1st March, 1902.—Remaining under treatment, February 24th, 6; cases reported during the week, 3; died during week, 1. Remaining under treatment, March 1st, 8. Total number of cases reported to date, 14; total number of deaths, 5; total discharged, recovered, 1. All the above cases have occurred in Brisbane; date of last case, February 27th, 1902.

Vital Statistics.—During the month of December, 1901, 145 births were registered in the district of Brisbane, being 9 less than in December,

1900. In the same district 105 deaths were recorded, being 19 more than in December, 1900. Within the municipality of Brisbane, 83·36 per cent. of the deaths were of children under 5 years of age, the true infantile mortality as compared to births for the city and suburbs being 17·88. Of the deaths occurring in Brisbane and suburbs during the month, 18 were from zymotic diseases, 84 from constitutional diseases, and 77 from local diseases. Of the zymotic group, 9 were from diarrhoea. Of the constitutional group, 15 were from cancer, 8 from phthisis. Of the local group, 21 were from enteritis and 7 from pneumonia.

Tasmania.

During the month of January, 1902, 120 births were registered in the districts of Hobart and Launceston, the same number as in the corresponding month of 1900, and an increase of 4·4 as compared with the average of the births recorded in January during the last five years. The deaths registered in January, 1902, in Hobart and Launceston numbered 94. Of these, 5 died from zymotic diseases, 15 from constitutional diseases, 21 from developmental diseases, 41 from local diseases. Of the developmental group, 20 deaths occurred from old age. In the country districts in January, 1902, 291 births and 75 deaths were registered.

South Australia.

Vital Statistics.—During the month of December, 1901, 664 births were recorded in South Australia, or 185 per cent., the lowest recorded in the period 1896-1901, inclusive. For the same month 407 deaths were recorded, or 113 per cent. In 1896 the percentage showed 110; in 1899, 101; in 1900, 98. During December, 1901, 86 deaths occurred from zymotic diseases (diarrhoea 60), of these 52 were under one year. Only in the years 1897 and 1898 was this mortality exceeded. Constitutional diseases caused 59 deaths (phthisis 30, tuberculosis 7), the highest rate during the five years, 1897 only excepted. Developmental diseases accounted for 34 deaths in the month under notice, the lowest record during the five years. Local diseases caused 181 deaths, 62 of which were under one year. This mortality was only exceeded in the years 1897 and 1898.

In the city of Adelaide for the month of December, 1901, 73 births and 89 deaths were recorded, both of which numbers represent the average for the five years 1896-1901. Zymotic diseases caused 10 deaths, constitutional diseases were responsible for 15 deaths (cancer 4, phthisis 5, tuberculosis 4), developmental diseases caused 11 deaths, and local diseases 43 (enteritis 12).

Central Board of Health.—A meeting of the Central Board of Health was held last month. The chief inspector furnished a report on the sanitary condition of the district of Nairne, and the condition of cowkeepers' premises in the district. The infectious disease returns showed five cases of typhoid fever at Port Adelaide, four at Adelaide, and one at each of the following places:—Rosewater, North Croydon, Bundaleer, Gawler, Leamington, Kadina, Kapunda, Port Augusta, and Hilton; five cases of pulmonary tuberculosis at Adelaide, two at Port Adelaide, and one at Wallaroo; one case of diphtheria at each of the following places:—Adelaide, Bowden, New Hindmarsh, and East Adelaide, one case of erysipelas at Adelaide, and one at Yalumba; one case of puerperal fever at Hundred of Younghusband. The infectious disease mortuary returns showed two

deaths from pulmonary tuberculosis at Adelaide Hospital and one at each of the following places:—Robe, North Kensington, Rowland's Flat and Langmeil. One death from diphtheria at Port Lincoln; one death from puerperal fever at Glenelg; one death from erysipelas at Alberton; and one death from enteric fever at Burra hospital.

New Zealand.

Dr. Mason, the Chief Health Officer of New Zealand, has made report on his inspection of the sites suggested for consumptive homes. He is of opinion that the most suitable site in the South Island is Port Lyttelton, and for the North Island, he favours the establishment of a sanatorium in the Wairarapa district.

HOSPITAL INTELLIGENCE.

Hobart Hospital.—An operating table, which arrived from New York has been fitted up in the operating theatre at the Hobart General Hospital. It is of the latest approved pattern. The frame is of steel, white enamelled, mounted on four heavy rubber wheels. The top is of heavy $\frac{1}{2}$ in. French crystal glass. The table, which cost about £40, was purchased out of the Grimston bequest. One of Aps's-Newton 18 in. Röntgen Ray apparatus is expected shortly. Its cost will be about £180. This has also been bought out of the Grimston bequest.

Sydney Hospital Annual Meeting.—The annual meeting of the Sydney Hospital was held on February 26th. The president, Sir Arthur Renwick, M.L.C., submitted the report and balance sheet. The report set forth that the patients remaining in hospital on 31st December, 1900, were 286, patients admitted during 1900, 3,951; total under treatment, 4,237; discharged cured, 2,467; relieved, 873; unrelieved, 165; died, 428; remaining in hospital 31st December, 1901, 304; percentage of mortality on admissions, 10·9; average number of admissions per week, 76; the average number of beds occupied, 306; average duration of stay in days, 31; the number of accidents and urgent cases admitted without recommendations, 1,710; the number of cases admitted on Government orders, 1,475; the number of cases admitted on subscribers' orders, 103; the number of cases admitted who contributed to their maintenance, 663. Of the 428 deaths 121 died within 24 hours of admission. The number of operations performed during the year was 2,938. There were 28,647 new cases in the out-patients' department, and 96,101 attendances. The cost per bed for 1901 showed an increase of £1 15s. over that of 1900, being £63 7s. 7d., as against £61 12s. 7d. The increase was accounted for by the increase in the cost of almost all the commodities required by the hospital. The subscriptions showed an increase of £264 over those of the previous year. Towards the income the Government contributed as subsidy on subscriptions and donations, £3,777 2s. 7d.; for maintenance of destitute patients, £9,047 8s. 4d.; and for the Regent street branch the sum of £700.

Prince Alfred Hospital, Sydney.—The annual report of this hospital, presented at the meeting of subscribers on March 14th, states that the number of patients remaining in hospital on December 31st, 1900, was 223; admitted during the year 1901, 3,216; total under treatment, 3,439. Of these 1,848 were cured, 725 relieved, 268 unrelieved, 360 died, and 238 remained

in hospital, December 31st, 1901; total, 3,439. The number of beds in the hospital was 236; the average number of patients resident daily, 285; mean residence of patients in days, 28; rate of mortality per cent. (deducting the 61 deaths which occurred in patients within 24 hours of admission), 9.29; rate of mortality per cent. over total cases under treatment, 10.46; rate of mortality per cent. on admissions, 11.19; number of attendances in out-patients and casualty departments, 44,146; number of individual patients in these departments (approximately), 11,000. The income of the year was £18,317 2s. 4d., towards which the Government contributed £10,883 2s. 2d. Of the latter amount £3,189 0s. 2d. was in the form of a subsidy, on the £ for £ principle, and the remainder for the maintenance of Government patients. The average cost per bed for the year amounts to £68 8s. 9d., as against £66 7s. 6d. in 1900. The slight increase in the average as compared with the previous year is due to the fact that in several items prices were higher than in the previous year, and that the imposition of the new Federal tariff duties also affected the prices of some articles of daily use for a part of the year.

The Women's Hospital, Melbourne.—The deadlock at this hospital resulting from the action of the Committee in dismissing Drs. Lewis and Yule, the resident medical officers, still continues. The Committee has not succeeded in filling the positions of medical officers to the midwifery and the infirmary departments. Advertisements have been published calling for applications, but, contrary to previous experience, no applications were sent in. On again applying for the vacant positions on the resident midwifery staff, Drs. Lewis and Yule invited the Committee to consider that in the present state of outside medical opinion, right or wrong, it was highly improbable that the Committee would be offered the services of any satisfactory men for the positions, a fact that it might infer the more surely from the circumstance that in spite of the close of the Medical Congress at Hobart there were no applications. It was clearly impossible, the letter stated, for one man, unceasingly on duty, to do the work hitherto performed by two for any length of time. It was useless for the Committee to plead inability to fill the positions when it had before it, still valid, the offer made by them last week. It was unreasonable to suppose that, because they could not see their way clear to carry out the Committee's orders in reference to closing the hospital, they could not now loyally assist in keeping it officially open. It was resolved to inform the applicants that the Committee did not require their services. Under these circumstances we hope that no other medical men will offer their services for these appointments. We think the Committee ill-advised in refusing to re-appoint Drs. Lewis and Yule, considering the value of their past services to the hospital, and trust they will yet be induced to see the wisdom of reversing their decision.

Alfred Hospital Melbourne—The ceremony of opening a new ward of the Alfred Hospital, to be known as the Michaelis ward, was performed by Lady Clarke last month, in the presence of a large number of ladies and gentlemen, including the State Governor, Sir George Clarke. Mr. R. L. J. Ellery, the chairman of the committee of management, stated that by the gift of £1000 from the family of the late Moritz and Rachel Michaelis, of St. Kilda, they had been able to equip the ward and permanently devote it to child patients. The maintenance of the ward was a serious

matter, but the committee counted upon the generous support which had always been accorded it by the public. The new ward, which is a well ventilated, and airy apartment on the extreme western side of the hospital, contains 24 cots.

Victorian Eye and Ear Hospital, Melbourne.—The average daily number of patients at the hospital is about 150. The patients come from all parts of the State. The total number treated last year was 6,245, and the number of attendances of out-patients 28,791. The number of operations performed was 1,478. It is said that the hospital cannot carry on under present conditions. The reception hall for patients is a compartment that would hardly hold 50 people. As it is, some 200 people, most of them patients, crowd into it daily. There appears to be little likelihood of sufficient subscriptions coming in to carry out the enlargement of the building which is so absolutely necessary. Unless the Government comes to the assistance of the hospital in carrying out an extension of the building, there is a great probability of the institution having to limit considerably the scope of its work.

Dubbo Hospital, N.S.W.—Drs. Tresidder, Burditt, and Barton, have been appointed honorary medical officers for Dubbo Hospital for the ensuing year. Dr. Hope has resigned his appointment on the hospital staff.

PERSONAL ITEMS.

Dr. JAMES REIACH, recently *locum tenens* for Dr. J. A. Dick of Randwick has succeeded to the practice of Dr. Robert Lamb at Molong, N.S.W.

Dr. ASHER of Lithgow, N.S.W., has been presented with a handsome souvenir by the members of the A.H. and P. Society in appreciation of his services during the ten years of his secretaryship. Dr. and Mrs. Asher have left for England.

RETURN OF DR. ASHBURTON THOMPSON.—Dr. Ashburton Thompson, President of the Board of Health, Sydney, returned to Sydney a few days ago after a trip to Europe, and very much improved in health. He stayed a considerable time in Paris, where he saw Drs. Roux and Momont, and visited the new hospital for infectious diseases attached to the Pasteur Institute. In London, he took advantage of the first opportunity of formal presentation to the Incorporated Society of Medical Officers of Health which occurred, since he had been chosen to be an honorary Fellow (a distinction he received in company with Lord Lister), and then joined in a discussion on the management of plague epidemics which was raised by a paper read by Dr. D. S. Davies, M.O.H. for Bristol. He was gratified at finding that our work at Sydney was thoroughly well-known, and that the discussion was largely guided by our recorded experience. He saw much of Mr. Shirley Murphy, M.O.H. London C.C., and discussed with him the terms of an amendment to P.H. (L.) A., by which, acting on our experience and our proposal for amendment of the P.H. Act, evidence that a building was infested by rats or so constructed as to be liable to become infested, would be made a nuisance, liable to be the subject of summary proceedings, and subsequently be discussed the same point with Mr. Power, M.O.H. to L.G.B. He visited Professor G. A. Wright at Netley, not merely as an old friend, but in his capacity of member of the late Plague Commission in India. He found him in his laboratory, very busy with his vaccine

against typhoid fever in company with Major Leishman, R.A.M.C. For a similar reason he visited Dr. Armand Buffer at Alexandria (President du Conseil Sanitaire, Maritime, et Quarantaine d' Egypte—the International Quarantine Board), and also visited Pinchin Bey, M.D., at Cairo, head of the internal sanitary service of the Egyptian Government, and made acquaintance of Dr. Bitter, the well-known bacteriologist there. In England he saw several garbage destructors, and soon found that there was nothing new, and had no reason to modify the opinions he expressed to the committee of the City Council a year or so ago, but was, on the contrary confirmed in them. He interviewed Professor MacFadyean, M.B., Royal Veterinary College, on the question of securing candidates for veterinary posts on the staff of the Board of Health. As regards plague, he learned nothing likely to be of service here, but rather found that we were relied upon there; and he was entirely confirmed in his opinion that Asiatic countries' present conditions are so inimical to epidemiological (as distinguished from clinical and pathological) work that the slight attempts at it hitherto made have yielded results of very little value, and have rather tended to confusion than to enlightenment.

Dr. E. MAYNARD PAIN, late Superintendent of Prince Alfred Hospital, Sydney, left Sydney on Monday last, March 17th, for his new sphere of labour as one of the medical officers of the Church Missionary Society's Hospital at Old Cairo, Egypt. Dr. Pain is accompanied by his wife and child, and they leave us with the hearty good wishes of a large circle of friends.

Dr. W. COLIN MACKENZIE of Melbourne University, and formerly resident physician of the Melbourne and Children's Hospitals, has been appointed medical tutor of Trinity College. Dr. MacKenzie will supervise the work of all medical students of the college above first year standing.

Dr. W. H. JOHNSTON, formerly of Dapto, has succeeded to Dr. Watson's practice at Richmond, N.S.W.

Dr. D. P. O'BRIEN, has removed from Ravenswood to Rockhampton, Queensland.

Dr. J. W. FARNDAL, late of Fiji, has settled at Dooleies, Victoria.

Dr. T. W. LIPSCOMB has succeeded to Dr. Cosh's practice at Leichhardt.

Dr. A. J. DAVIES, late of Hill End, has settled at Canowindra, N.S.W.

Dr. CHARLES RYGATE of Wellington (N.S.W.) who has acted as medical officer to the local branch of the M.U. Order of Oddfellows for about nine years, was on Wednesday evening, March 6th, entertained by the members of that body at a smoke concert, prior to his departure on a tour to the Continent, and was presented with a handsome travelling bag and also an illuminated address. Mrs. Rygate was presented with two handsome gifts by local residents.

Dr. A. W. FAULKNER, assistant medical officer at Seacliffe Asylum, has resigned from that position.

Dr. GOLDSMITH, the Government Medical Officer for the Northern Territory, arrived in Adelaide on February 7th on twelve months' leave of absence. He proceeds

to London to attend the annual meeting of the British Medical Association. His object in attending is to try and institute some system of studying the tropical diseases in Australia on similar lines to or in conjunction with the tropical medical schools in London and Liverpool.

Dr. HOWDEN, of Dunedin, has taken charge of Dr. Rodgers' practice in the Wyndham (N.Z.) district, during the latter's absence from the colony.

Dr. W. A. LOGAN, surgeon at the Timaru Hospital, N.Z., resigned his position on the 21st instant, owing to ill-health. Dr. Bett, of Pleasant Point, has been appointed to fill the vacancy.

Dr. MASON, Chief Health Officer, has been examining the Port Hills, N.Z., with a view to their suitability for the proposed consumption sanatorium.

The will of the late Dr. ALEXANDER STEWART PATTERSON, formerly colonial surgeon, who died at Adelaide, S.A., on January 6th, has been lodged for probate. The estate, which is sworn not to exceed £25,000, has been bequeathed to the testator's relatives.

Dr. DAVID ARTHUR WELSH, the new Professor of Pathology of the Sydney University, arrived in Sydney by the "Oceana" on Saturday, March 8th, and has entered upon his duties.

Dr. NOONAN, of Hamilton (Tas.), has disposed of his practice to Dr. John Stewart, of Sydney.

MEDICAL APPOINTMENTS.

The following Medical Appointments are announced :
NEW SOUTH WALES.

Brown, A. E. N., L.R.C.P. & L.R.C.S. Edin., to be Acting Visiting Surgeon to the Gaol at Wagga Wagga, during the absence of Dr. Edgar H. Thane, on leave.

VICTORIA.

Gamble, Morris Frederick H., L.R.C.S. Ed., to be Medical Superintendent of the Ballarat Lunatic Asylum, *vice* J. Steel, M.B., absent on leave.

Hearne, William Western, M.B., to be Public Vaccinator for the North-eastern Vaccination District, during the absence of Abraham Haynes, L.R.C.P., on leave.

Houman, Dr. Andrew, of Williamstown, to be Certifying Medical Practitioner, for the purposes of the Factories and Shops Acts, *vice* Dr. Ellison, resigned.

Lynch, Dr. Peter, Carlton, to be Certifying Medical Practitioner, for the purposes of the Factories and Shops Acts, *vice* Dr. J. De Burgh Griffith, resigned.

Muir, William Charles Crawford, M.B., to be Officer of Health for the Shire of Alberton.

Mullen, William Lowell, M.B., to be Medical Superintendent of the Yarra Bend Lunatic Asylum, *vice* W. L. Watkins, L.R.C.S. Irel., absent on leave.

Park, John Steel, L.R.C.P., to be Officer of Health for the Shire of Cranbourne.

Peipers, Frederick, M.D., to be Officer of Health for the Shire of Kerang.

Rosenthal, Jacob, M.B., to be Officer of Health for the United Shire of Newham, *vice* Johnstone Simon Thwaites, M.B.

SOUTH AUSTRALIA.

Sangster, John Ikin, M.B.C.S., to be a Member of the Board of Advice for the School District of the Burra. The following appointments have been made at the Adelaide Hospital:—

Borthwick, Thomas, M.D., to be Honorary Bacteriologist.

Frost, Constance Helen, M.B., to be Assistant Bacteriologist.

Lynch, Arthur Francis, M.B., B.S., to be Honorary Pathologist.

NEW ZEALAND.

Cook, Percival Robert, M.B., to be Public Vaccinator for the District of Waiwara, *vice* Dr. FitzHenry, resigned.
 Cran, William James, M.B., to be Public Vaccinator for the District of Brunner.
 Mackenzie, Murdoch, M.B., to be Port Health Officer for the Port of Westport.
 Moore, Walter W., M.B., to be Public Vaccinator for the District of Nelson.
 Platts, Elizabeth, M.B., to be a Public Vaccinator for the District of Wellington.
 Roberts, Edward John, M.B., to be Port Health Officer for the Port of Nelson, *vice* Dr. Leggatt, deceased.
 Todd, William, M.D., to be a Public Vaccinator for the District of Larnedden.

TASMANIA.

Crowther, Edward Lodewyk, M.D. Aberd., M.B. and C.M., L.R.C.P. Edin., M.R.C.S. Eng. and L.M., L.S.A., to be a Member of the Central Board of Health, in succession to Dr. C. Barnard, resigned.

WEST AUSTRALIA.

Blick, Dr., to be Officer of Health, Broome.
 The following honorary appointments have been made to the Medical Staff of the Perth Public Hospital:—Senior Officers—Senior Surgeon: F. Tratman, M.D. Lond., M.R.C.S., L.R.C.P., D.P.H. Ophthalmic Surgeon: H. T. Kelsall, M.D., B.S. Lond., M.R.C.S., L.R.C.P. Junior Officers—Assistant Gynaecologist: H. Trebhowan, M.B., M.S. Aberd. Assistant Gynaecologist: H. Horrocks, M.D. Lond., B.S., M.R.C.S., L.R.C.P., D.P.H.
 The undermentioned have been appointed the Medical Board of Western Australia, under the provisions of "The Medical Act, 1894":—Drs. T. H. Lovegrove, H. T. Kelsall, G. F. McWilliams, J. W. Hope, H. J. Lota, S. Macaulay, and J. S. Hicks; Dr. T. H. Lovegrove to be the President of the Board.

MILITARY INTELLIGENCE.

COMMONWEALTH ARMY MEDICAL SERVICE.

To be Medical Officers, with the local and temporary rank of Captain:—Alexander Y. Fullerton, M.R.C.S., L.R.C.P.; Adam Richard Stackpoole, L.R.C.S.

NEW SOUTH WALES.

Colonel W. D. Williams, C.B., has been appointed Director General of the Commonwealth Defence Forces.

NEW ZEALAND.

Surgeon-Captain Francis Courtenay Sutherland Forbes, New Zealand Volunteer Medical Staff, has been appointed a Surgeon-Captain in the New Zealand Militia.

Surgeon-Major Walter Relf Pearless, New Zealand Volunteer Medical Staff, has been appointed Surgeon-Major in the New Zealand Militia.

Dr. Forbes of Waihi, N.Z., left with the Eighth Contingent as one of the medical officers.

VICTORIA.

Surgeon Harry Paynter Sloggett, of the unattached list, Victorian Naval Brigade, has been attached for duty with the Permanent Naval Forces during the absence, on leave, of Fleet-Surgeon C. A. Stewart.

James Fox Barnard M.B., Ch.B., has been appointed Medical Officer of the First Commonwealth Contingent for service in South Africa, with the rank of Lieutenant.

Captain James De Burgh Griffith has resigned his appointment of Medical Officer of the First Commonwealth Contingent for service in South Africa.

MEDICAL NOTES.

The council of the Melbourne University invited the council of the Pharmaceutical Society of Australia to nominate one of the Melbourne College of Pharmacy lecturers for appointment as representative of the departments of Materia Medica and Pharmacy on the Faculty of Medicine. Dr. F. Hobill Cole has since been appointed to the position.

Exhibits at the Congress.—At the recent Intercolonial Medical Congress at Hobart, a fine collection of surgical instruments up to date, was exhibited by Messrs. Carl Zoeller and Co., of Brisbane, and in charge of Mr. J. P. Cusack. In the entrance Mr. T. P. Davern had a fine show of Messrs. Burroughs, Wellcome and Co.'s lines, comprising tabloid and solid brand products, tabloid brand hypodermic products, hypodermic serum syringes, serums, Fairchild's preparations, and a new departure in the shape of the "Wellcome" brand of fine chemicals. Messrs. Seabury and Johnson's (London) goods in the shape of medical and surgical materials for dressings and pharmaceutical products, were displayed by Mr. F. Hargreaves; and a similar show, together with surgical instruments by Mr. G. Arnold, of Sydney.

Return of Miss M'Gahey.—The matron of Prince Alfred Hospital, Sydney (Miss M'Gahey), was welcomed on her return from a trip to Europe and America at an "At Home" at the Hospital on February 28th. The Chairman of the Board of Directors, Professor Anderson Stuart, in a few words spoke of the value to the Hospital at this juncture, of the matron's visit, and the large amount of information she had acquired on her visits to the different English and American hospitals. Miss M'Gahey resumed duty at the Hospital on March 1st.

The Siege of Ladysmith.—An interesting lecture was recently given at St. Mary's, N.S.W., by Surgeon-Captain Buntine, who was a medical officer with the British forces in South Africa, and was in Ladysmith during the siege. The lecturer gave particulars in detail of the siege of Ladysmith, his description of the hardships and privations endured by all, especially the sick and wounded, being very realistic. Surgeon-Captain Buntine was the first to be recommended for the V.C. during the present war.

A True Hero of Medicine.—A subscription list having been opened in the columns of the *Australasian Medical Gazette* in aid of the widow and children of the late Dr. Smyth (see the *British Medical Journal* of December 7th, 1901, p 1709), we beg to acknowledge the receipt of the following additional contribution:—Dr. A. K. Hoets, Burrows, £1 1s.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

VICTORIA.

For registration.

Bennett James, M.B. Melb. 1901.
 Bona, Percy Arthur, M.B. Melb. 1901.
 Coto, Daniel Samuel, L.R.C.P. et R.C.S. Edin. 1900.
 Eaves, Wilberforce Vaughan, M.R.O.S. Eng. et L.R.C.P. Lond. 1899.
 Farndale, John William, M.R.C.S. Eng., L.R.C.P. Lond. 1898.
 Gunn, John, L.F.P.S. Glas. 1879.
 Harris, James Frederick, M.B. et Ch.B. Melb. 1901.
 Hiller, Konrad, M.B. Melb. 1901.
 Law, Charles Donaldson, L.R.C.P. et R.C.S. Edin. 1898.
 Meares, Albert George, L.R.C.P. et R.C.S. Edin. 1900.
 Summons, Samuel William Henry, M.B. Melb. 1901.
 Robertson, Annie Susan, M.B. et Ch.B. Melb. 1901.

Erased from the Register.

Casey, Cornelius Gavan, M.R.C.S.
 Ray, Henry, M.B.
 Williams, Ezra Hurlburt, L.R.C.P.—deceased.

WESTERN AUSTRALIA.

Scott, George Melmoth, M.B., B.S. Camb. 1890.
 Smyth, Sydney Richard, L.R.C.S. Irel. 1867; L. and L.M., K. and Q. Coll. Phy. Irel. 1871.
 Wills, Bertram Shera, L.R.C.P. Lond.; M.R.C.S. Eng. 1897; F.R.C.S. Eng. 1901.

BOOKS RECEIVED.

- ESSENTIALS OF HISTOLOGY, Leroy, M.D. W. B. Saunders & Co.
- BACTERIOLOGY AND SURGICAL TECHNIQUE FOR NURSES, E. M. A. Stoney. W. B. Saunders & Co.
- RHINOLOGY, LARYNGOLOGY AND OTOTOLOGY, E. P. Friedrich, M.D. W. B. Saunders & Co.
- TEXT-BOOK OF PRACTICE OF MEDICINE, 2 Vols., Eichhorst. W. B. Saunders & Co.
- TEXT-BOOK OF HISTOLOGY, A. A. Böhn and M. von Davidoff. W. B. Saunders & Co.
- TEXT-BOOK OF PHYSIOLOGY, Vol. I. and II., edited by W. H. Howell, Ph.D., M.D. W. B. Saunders & Co.
- ESSENTIALS OF DISEASES OF EYE, E. Jackson, M.D. W. B. Saunders & Co.
- MODERN MEDICINE, J. L. Salinger, M.D. W. B. Saunders & Co.
- AMERICAN YEAR BOOK MEDICINE (1), SURGERY (1). W. B. Saunders & Co.
- ANATOMICAL ATLAS OF OBSTETRICS, O. Schaeffer, M.D. W. B. Saunders & Co.
- OBSTETRIC AND GYNÆCOLOGIC NURSING, E. P. Davis, A.M., M.D. W. B. Saunders & Co.
- ATLAS AND EPITOME OF LABOUR AND OPERATIVE OBSTETRICS, O. Schaeffer, M.D. W. B. Saunders & Co.
- AMERICAN ILLUSTRATED MEDICAL DICTIONARY, Dorland. W. B. Saunders & Co.
- MENSTRUATION AND ITS DISORDERS. By A. E. Giles, M.D., B.Sc., F.R.C.S. Messrs. Bailliere, Tindall & Cox.
- THE MORPHIA HABIT. By Oscar Jennings, M.D., M.R.C.S. Bailliere, Tindall & Cox.
- THE HEALING OF NERVES. By C. A. Ballance, M.S., F.R.C.S., and P. Stewart, M.D., M.R.C.P. Messrs. MacMillan & Co., Ltd.
- PRESCRIPTION WRITING. By M. L. Neff, M.D. Philadelphia: F. A. Davis Co.
- STUDIES IN THE PSYCHOLOGY OF SEX. By Havelock Ellis, L.S.A. Philadelphia: F. A. Davis Co.
- BACTERIOLOGICAL DIAGNOSIS. By W. D. Emery, M.D., B.Sc. Lond. London: H. K. Lewis.
- ROUGH NOTES ON REMEDIES. By W. Murray, M.D., F.R.C.P. Lond. London: H. K. Lewis.
- THE ROENTGEN RAYS IN MEDICINE AND SURGERY. By F. H. Williams, M.D. Harv. London: Macmillan & Co.
- Books received February, 1902, from Messrs. P. Blakistons, Son and Co., Walnut Street, Philadelphia, per Mr. L. Bruck, Sydney.
- THE MEDICINAL PLANTS OF THE PHILIPPINES. By T. H. Pardo de Tavera, M. D. Translated by Jerome B. Thomas, jr., M.D.
- MANUAL OF PHYSICAL DIAGNOSIS FOR THE USE OF STUDENTS AND PHYSICIANS. By James Tyson, M.D., fourth edition.
- PHYSIOLOGIC THERAPEUTICS. Edited by S. S. Cohen, M.D., Vol. VI., Dietotherapy and Food in Health, by N. S. Davis, jr., M.D.
- CLINICAL HÆMATOLOGY. By J. C. DaCosta, jr., M.D.
- DISEASES OF THE DIGESTIVE ORGANS IN INFANCY AND CHILDHOOD. By Louis Starr, M.D., third edition.
- DISEASES OF THE INTESTINES. By J. C. Hammeter, M.D., Ph.D., Vol. I.

Microscope for Sale.—Reichert's large horse-shoe stand, triple nose-piece, condenser, diaphragm, etc., objectives, $\frac{1}{2}$ and $\frac{1}{4}$ inch. Eye-piece, No. 3. As good as new. On view at Elliott Bros.

BIRTHS, MARRIAGE AND DEATHS.

BIRTHS.

- DEANE.—On the 2nd March, at Carlsbrook, the wife of Edward Wilkinson Deane, M.B., Ch.B., of a son.
- GRIEVES.—On the 4th March, at her residence, Wahroonga, the wife of Arthur Grievess, L.R.C.P., M.R.C.S., of a son.
- HAWTHORNE.—On the 16th February, at her residence, Warrawee, Mudgee, the wife of E. Sydney Hawthorne, F.R.C.S., L.R.C.P., of a daughter.
- LOOSLI.—On the 4th February, at Glendalough, Burke-road, Camberwell, the wife of R. J. Loosli, M.B., B.S., of a daughter.
- STENHOUSE.—On the 18th January, 1902, at St. Bathans, the wife of Dr. Andrew Stenhouse, of a daughter.
- YOUNG.—On the 3rd March, 1902, at Kilbride, Edgecliff-road, Sydney, the wife of H. O. Taylor Young, M.D., of a son.

MARRIAGE.

- TRESS—CRAGO.—On the 12th March, at St. Peter's, Woolloomooloo, by the Rev. T. B. Tress, father of the bridegroom, assisted by the Rev. J. H. Mullens, Herbert Langley Tress, to Elsie Violette, second daughter of W. H. Crago, M.R.C.S., L.R.C.P., of 16 College-street, Sydney.

DEATHS.

- JOHNSON.—On the 22nd January, at Rydendale, Tasmania, John George Johnson, M.R.C.S. Eng., L.R.C.P. Lond., aged 44 years.
- SHAWEN.—On the 24th February, 1902, at Prince Alfred Hospital, Sarah Jane, widow of the late Alfred Shawen, M.D. Home papers please copy.

NOTICES.

THE "GAZETTE" IS EDITED FOR THE PROPRIETORS BY GEORGE E. RENNIE, M.D., SYDNEY, N.S.W.; AND FOR THE OTHER BRANCHES OF THE BRITISH MEDICAL ASSOCIATION BY A. B. BROCKWAY, BRISBANE, Q.; H. W. BRYANT, WILLIAMSTOWN, VIC.; J. B. GUNSON, ADELAIDE, S.A.; HERBERT HORROCKS, PERTH, W.A. ORIGINAL ARTICLES WILL BE INSERTED SOLELY ON CONDITION THAT THEY ARE NOT CONTRIBUTED TO ANY OTHER PERIODICAL.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other States. Business communications should be addressed "The Manager."

Contributors will have to pay the cost of illustrations accompanying their articles.

WANTED, by Cambridge University Graduate, practice or partnership in an Australian city (preferably in the South). Income about £1,000. Communications to be addressed C.R., "Knutsford," Glenelg, South Australia.

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AUSTRALASIAN MEDICAL GAZETTE.

ORIGINAL ARTICLES.

THE POLICY OF THE NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

*Annual Address at the Annual General Meeting of
this Branch.*

By J. Foreman, M.R.C.S., Sydney,
RETIRING PRESIDENT.

THE report of the Council deals with the most important matters that have engaged the attention of the Branch during the year, and the members are to be congratulated on the success that has attended the year's work. Papers of a high order of merit, and showing considerable research and observation, have been read, and the discussions have been useful and instructive. A great deal of praise is due to our excellent Secretary, who spared neither time nor trouble in discharging his onerous duties. Dr. Crago has carried out his work as Treasurer in his usual satisfactory manner. The *Gazette* Committee (Drs. Knaggs, Crago and Worrall) in the management of the Journal have earned the thanks of the members for the time and trouble they have expended.

It is with very great regret the Council reports the death of so many members during the year. Amongst these were two, both of whom I knew very well, and of whom I wish to make special mention. First, that of Dr. Wright, a kind, courtly gentleman in every sense of the word. The younger generation of the profession does not understand the amount of gratitude it owes him as a model at once of courtesy and professional courage. It requires a mind of the highest order, and courage of the highest type, to withstand blackmail, and this we found when it was required in Dr. Wright. The Victoria Cross is given for courage in the field. What reward is commensurate to courage like his? Dr. Dagnal Clark was for some years a member of the Council; he was of a stamp that I hope the Councillors will always be, giving every question careful consideration, and slow to make up his mind. When once he had formed a definite course he kept to it unflinchingly; there was nothing weak-kneed about him. These are types of men we can ill afford to lose.

During the year Dr. Knaggs resigned the editorship of the *Gazette*, after holding that position since its inception, six years ago, and he was accorded a hearty and well-merited vote of thanks at a meeting of the Branch. Our

new editor, Dr. Rennie, promises by his vigorous conduct of the journal to fulfil, and more than fulfil, the sanguine hopes we entertained on his appointment.

The profession and the public are under a great obligation to this and to former Governments for the practical sympathy they have so consistently extended to the sick poor, and for the liberality with which they have provided those noble hospitals by which Sydney is distinguished.

The present Premier is a large hearted, kindly man, who sympathises with the suffering poor, and gives practical effect to his sympathy by adding to our hospital accommodation as its urgent needs seem to require. In this and in many other ways the Premier has shown his desire to co-operate with our profession in alleviating the sufferings of the sick.

One great and necessary reform, I am happy to state, has been carried out in the Sydney Hospital with regard to paying patients. It is a great pity that the abuse of paying patients ever crept in, and it reflects great credit on the authorities of the Hospital that they have the courage, even though late in the day, to confine the Hospital to its proper use, that is, for the benefit and attendance of those who are sick and indigent.

While dealing with this subject I may venture to call your attention to the abuse of private wards in connection with some of the so-called charitable institutions of the city. Charity is charity, and money-making is money-making. It is best to keep them separate, and the man who accepts money from the private wards of his institution really ought not to try to pass himself off as a person engaged in furthering a work of charity. In Melbourne they manage things better in this respect, for we saw in the newspaper that Judge Hodges decided that the honorary medical officer of an institution has no right to claim fees from any person admitted for treatment, even in the private wards. To these gentlemen I would say avoid the appearance of evil, and let your attendance on the charitable institutions be really for the cause of charity, without the inducement of money. I understand that the majority of the members of the staffs on these hospitals are against the practice. It is to be hoped that they will be able to settle the matter amongst themselves without its having to come before a meeting of the Branch later on.

It occurred to me that perhaps the most interesting subject on which to address you

would be a consideration of some of the ordinary troubles that beset us in our daily professional life. In one way they have been of great advantage in that they have welded us together in a manner heretofore unknown in our profession in Australia, and I think we may well be proud of the part which this Branch of the British Medical Association has played in the matter. So conspicuous has been its excellence in this respect that I venture to prophesy before this year is over every medical practitioner who is not at present on the roll in this State, but who is worthy of becoming a member, will apply for election. It seems to me that some of our members are hardly sufficiently impressed with the far-reaching consequences of the questions with which we have to deal, or by the benefits to be obtained by united action. Our union is for defence and not for aggression, for the protection of our less prosperous members, not for the imposition of hard conditions on the public. Medical practitioners, as a body, cannot be accused of being business men, but even the dullest of us can learn from others, and the examples we see of co-operation levelled against us are sufficient to show us that only by standing loyally by each other can we avoid the traps that seem to be continually laid for us. In none of the provinces of Australia is our profession so well organised or so harmonious as in New South Wales, and, to my mind, we owe this result entirely to the British Medical Association, which has already done so much good, but which I believe and hope is only in its first youth. In future it will be as essential a qualification for the good man to belong to the British Medical Association as to be on the list of legally qualified medical practitioners—in fact, it will be something better, for it will show that in addition to being legally qualified he is willing to stand shoulder to shoulder with his fellow practitioners in defence of the just claims of the profession.

Now let us consider what this Association has done in the past year, and first of all as regards clubs. The proper and intelligent basis for the formation of a club or medical benefit society does not seem to be clearly understood by a great many either of the profession or of the public. The public, because they enter into an association, think they have a right to demand the services of medical men on any terms they may choose to formulate, whether these meet the requirements of the other side or not. Now that was not the original idea of contract practice. Contract practice was, and is, and must only be for the benefit of those who cannot afford to take the risk of being ill

and meeting the consequent expenses, and so they insure against such a contingency on just the same principles as they insure their lives. The medical profession has always recognised this, and has always been ready to recognise difficulties requiring adjustment for the benefit of both parties, but these contracts were only intended for the inclusion of persons whose incomes were so small that, whilst they wished to avoid sacrificing their self respect by relying on charity for medical attendance, they endeavour to make it worth a medical man's while to devote proper attention to them by associating themselves together for this specific purpose. Of course a medical man on his part has to guard against being imposed upon by people whose position should preclude them from contract attendance, and whilst we consider anyone with an income of £200 a year, or less, a fit and proper person to be included under these contracts, so long as it is effected through what we recognise as a legitimate benefit society, persons with incomes over that limit should be excluded, as they would be practically obtaining attendance under false pretences, and I cannot understand how any right-thinking, self-respecting man, in such a position, would take advantage of a quibble and demand that he is entitled to the medical benefits of such society, which never were, and never can be intended for those in easy circumstances. I have seen it stated in the papers that the members of lodges having over £200 a year do not aggregate more than 5 per cent. of the total members on the roll, and that of these but very few avail themselves of the club medical attendance. If this is so, what possible objection can there be to admitting the principle which we consider vital? The societies have succeeded in cutting the medical officers' fees down to a minimum, and it has always struck me as being one of the most extraordinary phases of human nature that, where questions of health are concerned, people, as a rule, like to get advice on the cheap, forgetting that, in other departments of life, with which they presumably are better acquainted, what is cheap is commonly nasty. We are not, as I said before, business people, but other considerations enter into medical practice that are entirely foreign to other professions. The public cannot complain of the profession for its selfishness, when its main object is not only to make people healthy, but to prevent their getting ill. We have no better example of this at the present time than the measures now being taken by the medical profession to stop the epidemics that have cost

the country so much, and the examples we have had of their practically stamping out typhoid and smallpox. The same position is evidenced in their actions with regard to medical benefit societies, which can never be entirely, and ought not to be merely a matter of £ s. d., and I cannot understand why the guiding spirits of these societies cannot take a broader view of the matter. There is no more certain thing in this world than that you never get thirteen pence for a shilling, and if you are going to cut down people in any walk of life who are serving you, you may be quite sure you get no more than the value of your money, and I should have thought that it would have been to the interests of the societies to obtain the best talent available (and they have some very good men), and that to ensure generous attendance they would not have scrupled to have paid them fairly; instead of this the chief aim seems to be to screw the doctor to the lowest possible rate, to be most exacting in their rules regarding his attendance, and then wonder why relations are so often strained. As a body there is no class of people on earth so easy to get on with as medical men, but to take advantage of their needs and the competition that necessarily ensues cannot be to the advantage of those who engage their services. See what has happened to this M.U.O. The able men who attended them previously have resigned under circumstances of which you are fully aware, and they have now four medical officers who are not members of the British Medical Association. I need say no more.

Another of the petty troubles which beset us arises out of the action of a body known as the Australian Natives' Association. Whether this Association is an embryo Africander Bond, or whether its aims are the most philosophical and desirable in the world, has absolutely nothing to do with us as a profession, but when they claim medical benefits because they are a registered friendly society, it is in that respect, and in its medical aspect only, that we have a right to object, and that we do strongly object is evident from the decision not to enter into contract relations with them, which was unanimously carried at a meeting of the profession specially convened for the purpose of discussing it. It seems a strange thing that any society should arrogate to itself the right to say to a body of educated men—you will have to do this, or that, whether you like it or not. Surely we have a right to a say in the matter. Surely we may not unreasonably form our opinion as to whether any particular society is entitled to the benefits of contract practice. Who gave

these gentlemen the right to compel us to attend them as a society? This is a matter that can only be arranged by mutual agreement, and, although any society has a perfect right to say to our Association—we should like you to attend us, we, on our part, have an equal right to decline if we consider the conditions unsuitable. The concession of 25s., instead of 16s. and 17s., which they are so fond of quoting, reminds me of what took place in the birth-place of this society in Victoria, where the members, at the commencement of their career, made lots of promises, and gave their medical attendants 25s. a year instead of the ordinary rate. Now it is not yet a very old institution (I believe it has lasted about six years), but in that short period they have managed to sweat the profession in Victoria by reducing the payment to 12s. 6d., and, from what I can hear, if they try they will soon have no difficulty in reducing it still further. Here in New South Wales in our dealings with this Association we intend to take as our motto the old principle of "*Principiis obsta*," i.e., deal with an evil before it becomes confirmed, and we have not the slightest intention of delivering ourselves, bound hand and foot, to the tender mercies of the Australian Natives' Association, as our unhappy brethren in Victoria, from their own accounts, seem to have done. Let the Australian Natives' Association carry out their own ends, whatever they may be, but let them refrain from attempting to impose on us by masquerading in the guise of an honest benefit society. Their real aim is something very different, and they only pretend to the character of a friendly society in order, by their scheme of medical benefits, to attract shoals of members. It is not my province to comment on any actions of the medical profession in another State, but, if what one hears is true, and from letters written by members of the profession there, the Australian Natives' Association, in its dutiful friendly capacity, has taken control of the elections of the medical men in the different hospitals which elections unfortunately are made by the subscribers generally, instead of through an intelligent committee. This has had the effect of practically silencing a great many voices in the profession in a manner which must be obvious to all of you, and what more pitiable sight can there be than that a body of educated gentlemen should be under the thumb of an organisation which is masquerading under the false pretence of being a friendly society, and at the same time using the medical benefits as the great inducement to members joining. This

is what happened in one of their art unions :— Amongst other arguments used to induce members to enrol themselves were some shouting out, "Here is a chance of a fortune for a bob, and medical attendance at 3d. a week." When the medical benefits were first mooted by the Australian Natives' Association our Secretary, Dr. Hankins, waited on their President and asked him if they proposed to have any wage limit. He replied, "No; they could not have any wage limit, otherwise they could not compete with the other benefit societies, who were not bound by any such limit. We are going to act on business principles, and we shall be guided by the law of supply and demand." And this reply was given by a protectionist M.P. But we often find that political principles, however strongly proclaimed, are only translated into action when great voting power is affected. The politicians think we have no such power. It is for you, gentlemen, to show they are mistaken. Some of the vapourings of the Australian Natives' Association are rather amusing than otherwise. They tell us, forsooth, that they mean to crush us by the aid of Parliament, and that they will get an Act passed compelling respectable members of the British Medical Association to meet in consultation the outsiders, whom they will be obliged to employ as their medical officers. It is said that an act of Parliament can do anything except make a man a woman; but I think we must add another limitation to its power, for no Act of Parliament could bring a respectable practitioner to consult with a man who is outside the pale of decent practice. Another threat which these gentlemen are good enough to use against us is to the effect that they will bring new medical men to the various country towns, and other places, to act as rivals to the men already established. We have often heard this kind of thing before. I have been told that nearly thirty years ago the same threat was used in Sydney when the societies endeavoured at that time to squeeze the medical men. They threatened to introduce young practitioners from England, and so crush the opposition of the established doctors; but their threats came to nothing, and so it will be with the Australian Natives' Association if they try it. "Surely in vain is the net spread in the sight of any bird," and he would be a very foolish bird who would set himself in opposition to his fellow-practitioners so as to bring the whole profession under the heel of the Australian Natives' Association. I think better of my fellow-practitioners, and I feel sure that no man of character would lend himself for a moment to such a suicidal

proposal. In fact, the threat is what the Americans call a "bugaboo," horrid in fancy, meant to frighten weak people, but when you take it by the throat there is nothing in it. Every sober, industrious practitioner can always make his way, and he is not the one to lend himself to such questionable ways. No, gentlemen, you need not fear the bugaboo. The organizer, or, as some would call him, the wire-puller, is fearfully and wonderfully made, and I advise you to beware of him. He toils not, neither does he spin, but he takes good care to live on the fat of the land, for he has the knack of making other people work for him. The latest work of his hands is known as the "Commonwealth Benefit Society," a worthy fellow of the notorious Peoples' Prudential, and I believe the offspring of the same brain. It is intended, as I am informed, to be a kind of cave of Adullam for the established benefit societies, where everyone who is discontented can take refuge. The prospectus promises mountains and marvels, but I strongly advise you to have nothing to do with it, or with any association except the *bona fide* benefit societies. We are determined not to enter into contract practice with any other society beyond those already existing, which were established solely for mutual help in time of sickness. For those who do not care to join one of these excellent institutions, there is the Sydney and Suburban Medical Society, where any one with an income of £200 or under can be attended by the best men in the profession, and where, if a consultation is necessary, it can be obtained at half-fees from any member of the British Medical Association. I must congratulate the Society on its success and the Secretary, Dr. O'Hara, is deserving of every praise.

I notice that at the Adelaide Congress of the Australian Natives' Association, the President said that if the medical profession desired to break up the friendly societies they would have to pay for it. How cleverly he tries to draw the public away on a false scent. He knows, or he ought to know, that there is no such intention; and, that there may be no excuse for any further misrepresentation, I state authoritatively that the profession not only has no idea of trying to break up a legitimate friendly society, but that we recognise their extreme usefulness, and that it is to the mutual advantage of persons with small incomes and of professional men that the club system should be maintained on just and proper lines. Every *bona fide* benefit society possesses our respect, and will always receive every assistance in our power; but sham benefit societies, whose real

objects are of a perfectly different character, will always meet with our unflinching opposition.

I was greatly struck, and I am sure all of you were, also, with an able article in a late number of the *Gazette* on the suggestion of the A.M.P. Society, to introduce a system of half fees for examination for insurance of £250 and under, and, as the writer stated, we can only regret that a society which divides a profit of nearly half a million a year, should seek to save the paltry sum of £1,200 a year by decreasing the rate of fees paid to the profession. This is only another instance that assists to prove that if any body of men desire to retrench, and there is any medical attendance at all connected with it, poor Pil Garlic always comes in for the first kick, and it further shows that we have no friends beyond ourselves. Needless to say, we are going to oppose this attempted imposition, for it is an imposition, for an examination made by a conscientious man must require the same skill, time, and trouble whether for an assurance of £100 or £1,000. I put the question to the manager when the secretary, Dr. Hankins, and myself, as president, interviewed him at his request, on the subject, "Do the medical examinations pay the society." The answer was "Yes."

Now, what lesson are we to learn from the events of the past year. It is this—that we have only ourselves to trust to, and that we can obtain our reasonable objects only by the thorough cohesion and mutual confidence of our members. Each man owes a duty to his profession, and is bound to see that at his hands at least the profession is not injured; nay, more, each man is bound to do all that in him lies to further the common interests of the profession, and he may rest assured that by so doing he is most efficiently furthering his own interest. The Council of this Association are your elected representatives, entrusted by you with the management of the affairs of the profession. They have a right to your confidence—they do nothing of importance without consulting the members, and they have a right to your generous support on all occasions. Union makes strength, and if we are only united the attacks of our enemies will leave us unscathed.

In conclusion, I have to offer you my warmest thanks for raising me to the position of president of this Association, the highest position in the gift of the profession, and the greatest compliment which it is in your power to pay, and I wish for the Association very many years of prosperity and success.

ACCORDING to the tables drawn up by the Registrar-General in connection with the census of London, there are about 5,000 doctors and 16,000 nurses in London.

A DISCUSSION ON CANCER.

Introductory Address by H. B. Allen, M.D.,
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At the Sixth Intercolonial Medical Congress, Hobart.

(ABSTRACT.)

Is Cancer a Parasitic Disease?—Many facts encourage the belief that cancer is a parasitic disease. The primary local manifestation, its infiltrating nature, the tendency to dissemination throughout the body, and the ultimate cachexia, all bear some analogy to the phenomena of tubercle and other processes due to microbic invasion. Cancer, or some disease closely resembling it, has been successfully inoculated in many cases from one laboratory animal to another; instances are sufficiently numerous, though not so well attested, of transfer from man to lower animals; and definite though guarded statements are made of successful inoculation from man to man. Repeatedly after operations for cancer, the disease has recurred in an obscure corner of a scar, or in the track of a trocar used in exploratory tapping, in such fashion as to convince the surgeon that he had unintentionally induced a fresh implantation. The so called parasites of cancer have been brought prominently before English readers by the work of Ruffer, Plimmer, and others. The parasitic theory of carcinoma is singularly attractive, because it seems to promise results in prevention and cure similar to those obtained in diphtheria and other microbic diseases.

There are, however, reasons of great weight against it. Cancer is pre-eminently a disease of declining life, occurring more and more frequently from middle life into advanced age, and in this respect unlike all known parasitic diseases. The primary growths themselves are often very unlike the results of parasitic infection. For example, a columnar carcinoma of the rectum may show an exaggerated system of tubular gland formation, extending in regular pattern through the *muscularis mucosæ*, and perhaps even through the main muscle coat before it tends to spread in looser irregular fashion. The disseminated growths of cancer bear the traces of the seat of the primary growth in a manner and to a degree never manifested in parasitic processes. The reason is simple. In the dissemination of tumours, a cell or group of cells is conveyed by blood or lymph to a new site, and grows there by its own multiplication into a secondary tumour. In tubercle, on the contrary, the parasite itself

is disseminated, and multiplies in a new site, there producing irritative lesions, the cells of which are not descended from those of the primary focus. Opinion is still divided concerning the parasitic origin of cancer, but, though I cannot regard the question as settled, my own opinion inclines decidedly to the negative.

The Intrinsic Theory.—The whole body is descended from a single original cell, and each part of the body inherits its qualities by continued descent from specialised offspring of that single cell. In each part there is no anarchical mob of cells, but a federal society, with due relations, restraints and provisions. Vessels, connective tissues and epithelial coverings are maintained in due relations to one another. The true marvel lies in the federal organisation of each portion of the body, maintaining it in due size and due relation of parts, rather than in the occasional aberrations that induce local over-growth or tumour formation. Carcinoma is a confused imitation of the embryonic process of gland formation, while sarcoma resembles the act of repair, persisting at some one stage or other, the growth in either case being without obvious purpose, without limit, unfederal, evil. *Cohnheim's* theory of persistent embryonic "rests" of connective tissue or epithelium, detached from their usual connections, will scarcely serve to explain the cancers of advanced life. *Ribbert's* theory of detachment of epithelium by activities of connective tissue can seldom apply. The specialisation of the malignant elements is biologic and functional, not mechanical. Mere misplacement of epithelium does not in itself induce carcinoma. Epithelial "rests" in the ovary or neck may remain inactive, or form dermoid cysts. Cancer sometimes originates in such "rests" or implantations, but there is the same difficulty in explaining such an event as when cancer starts in normally-placed epithelium. In any case, the explanation is not yet forthcoming.

Cancer a Local Process.—Cancer growth is essentially a local process, due to loss or perversion of the local controls, of the local federal bond. Now and then multiple primary cancers occur, just as with innocent growths. Such multiples are more often sarcomata than carcinomata. It is clear that the loss or perversion of control may be multiple, or may even be widely spread in some particular tissue, such as bone or skin.

Classification.—In general, the current classification of cancer into two groups, carcinoma and sarcoma, according as it arises from

epithelium or from connective tissue, is satisfactory in practice; and the same may be said of the consequent reference of carcinoma to the epiblast or hypoblast, and of sarcoma to the mesoblast. Difficulties were first found in tumours arising from serous membranes, and therefore mesoblastic, but having the histological structure of carcinoma. For such cases, the group of endotheliomata was established. Certain observers have been led to form a new section of archiblastic tumours derived from undifferentiated embryological elements, while others would divide endotheliomata into those akin to connective tissue and those akin to epithelial structures. Pathologists probably exaggerate the separation of one layer of the embryo from another, forgetting their common descent from the original fertile cell.

Increased Activity or Lessened Resistance.—In carcinoma, the question naturally arises, whether the epithelial invasion is due to some new power on the part of the epithelium, or some lessened resistance on the part of the connective tissues. The epithelium is always active, sometimes with great intensity, sometimes with quiet persistence. The behaviour of the connective tissue varies. In certain cases scarcely any change occurs, beyond the mechanical results of the epithelial inroad; but in others, the connective tissue is as active as the epithelium, playing no passive part, but showing itself an energetic partner in the tumour development, sometimes indeed so as almost to confound carcinoma and sarcoma together. Plain thinking leads us to ascribe cancer formation to a direct increase in the activities of cells, whether of epithelial cells in the case of carcinoma, or of connective tissue cells in the case of sarcoma. This opinion may be held with equal strength by the advocates and critics of the parasitic theory.

The Increased Activity may be Controlled.—It must not be thought that all hopes for the control of cancer, apart from simple extirpation, are bound up with the establishment of its parasitic origin. Curious cases are on record of spontaneous retrogression of malignant tumours. The occasional withering or even disappearance of carcinomata of the breast after the menopause or the removal of the ovaries, the shrinking of some rodent ulcers under the influence of the Röntgen rays, and the rapid changes in the way of degeneration and absorption induced by Coley's fluid in many sarcomata, especially of the spindle-celled type, prove conclusively that the special growing power of cancer elements can be restrained. It is important to note that, in

the three methods mentioned, the good results are limited to definite varieties of malignant growth; but, nevertheless, encouragement is given to seek more sure and general controlling power over the progress of cancer, and to obtain all the side-lights that such observations throw on the vexed questions of its nature and causation.

Dissemination.—There is urgent need for further study of the phenomena of dissemination, and of the conditions which encourage or forbid the formation of secondary growths. Why, for instance, should colloid cancer of the rectum or rodent ulcer of the neck have such enormous power of local growth, and so little tendency to disseminate? Why should a sarcoma of the testis infect the inguinal glands, while the axillary glands usually go free in sarcoma of the breast? Why are the secondary growths following carcinoma of the breast sometimes limited to the liver, and sometimes to the bones? Why should the secondary growths of sarcoma sometimes avoid the lungs, where they usually develop first? A very practical question is afforded, when in one woman a carcinoma of the breast grows to great size without infecting the axillary glands, while in another case these glands are involved in marked degree, while the breast itself has undergone but trifling enlargement. Some better explanation than *accident* is needed for delayed infection in one case, and early infection in the other.

Relation of Innocent to Malignant Tumours.—There is a wide-spread belief that innocent tumours have a marked tendency to become malignant. I am convinced that this tendency is much exaggerated. I do not affirm that innocent tumours have any exemption from cancer, but merely that too much has been made of their supposed tendency to become cancerous.

Influence of Race, Heredity, Irritation, &c.—Cancer is rare among the Australian aborigines, many years often passing without a single case being registered among the blacks remaining in Victoria, though the blacks are not exempt from either external or internal cancer. I am informed that cancer is also rare among the Maoris of New Zealand, a race of vastly higher type. By way of contrast, the Chinese in Victoria suffer severely from cancer. Great difficulties beset any attempt to estimate the influence of heredity in cancer. The famous series of cases related by Broca shows how terrible this influence may be, the series extending over seventy years, with fifteen cases, all descended from one woman with cancer of

the breast. Sibley found cancer of the uterus in a mother and her five daughters. But in general the power of heredity is infinitely less. Paget found that one-fourth of 322 cancerous patients were aware of the occurrence of cancer in other members of their families, but that only one in 25 had a parent dead from cancer. Snow, in 1075 cases, found a family history in 15.7 per cent., but in 78 healthy people he obtained a similar history in a rather higher percentage. Mr. Powys, of the Victorian Statist's Office, working from the standpoint of a mathematician, has minutely examined the curves of mortality at the various ages, from phthisis and cancer in Victoria and in England and Wales. He finds that in phthisis, the age mortality curve is heterogeneous, and may be resolved into two curves, an early curve, having its maximum in England between 25 and 30, in Victoria between 28 and 33, and a late curve, having its maximum in England between 45 and 50, in Victoria between 55 and 63. Mr. Powys suggests that the early curve probably consists of deaths due to contact with phthisical parents, the so-called hereditary phthisis, while the late curve pertains to phthisis acquired later in life from inhaled sputum, &c. In Victorian males the late curve is so strong that the whole tracing, even without adjustment, is markedly dicrotic. On the contrary, Mr. Powys finds that the age curve of cancer mortality is a homogenous curve, and cannot be split into separate components, and he infers that the dominant cause of cancer is single, and not composite. These striking observations and inferences have not yet been published, but will doubtless receive the careful consideration which they deserve. The influence of local irritation in favouring the evolution of cancer is beyond question, and fully recognised. As to general conditions, cancer may develop in the young or the old, the robust or the feeble, the stout or the lean, the nervous or the placid, the idler or the overworked. In a large proportion of cases, it appears in persons who have enjoyed a most healthy life; and patients with cancer seldom suffer from any severe intercurrent diseases, such as croupous pneumonia. But, on the contrary, I could quote from my own experience cases of cancer developing in patients with phthisis or with tuberculous intestine, or with the scars of old tubercle.

Prevalence of Cancer in Australasia.—The statistical tables, which I now have the honour formally to present to the Congress, have been prepared from data most kindly furnished by the Government Statists, with the gracious permission and countenance of His Majesty's

Ministers in the several States. The number of deaths attributed annually to cancer in Australia has risen in thirty years from 458 to 2,165, and in New Zealand in twenty years from 138 to 430, the registered deaths from cancer in Australasia during 1900 including 1,407 males and 1,188 females. If we take 100 as the standard for Australia thirty years ago, and for New Zealand twenty years ago, the deaths in Australia have increased to 480 for males and 465 for females, and the deaths in New Zealand to 367 for males and 260 for females. Hospital experience reflects this great increase. I have been Pathologist to the Melbourne Hospital for slightly over twenty-five years, and during that time have kept notes of 4,459 *post-mortem* examinations. During the first five years, 6·8 per cent. of the deaths so recorded were due to cancer; during the second five years, 6·9 per cent.; during the third, 9·1 per cent.; during the fourth, 10·2 per cent.; and during the fifth, 10·4 per cent.

Allowance must be made in the first place for increase of population; and it is then found that the Australasian death-rate from cancer for every 10,000 living has risen in the last thirty years for persons from 2·75 to 5·72; for males, from 2·65 to 5·91; for females, from 2·86 to 5·50; or, if we take 100 as the standard thirty years ago, to 223 for males, to 192 for females. *In this short period, therefore, the recorded cancer rates per 10,000 living have somewhat more than doubled in males, and somewhat less than doubled in females. The female rate, which was the higher, has become substantially the lower. While cancer may occur in certain forms at any age, it is pre-eminently a disease of later life, increasing more and more in prevalence as age increases beyond the middle term. In Australasia there has been a striking increase in the number of old people, of persons in the cancer period, both an absolute increase, and an increase in proportion to the whole population.* In 1871, if we exclude New Zealand, but include Western Australia, there were 6,392 persons of 75 and upwards in Australasia; whereas, in 1900, if we include New Zealand, but exclude Western Australia, it is estimated that there were 34,241 persons of 75 and upwards. If we consider the proportions which those living at the several age periods bear to the whole population, we find that the relative increase in favour of the elder folk begins with the decade from 55 to 65, and increases into old age; so that from 75 upwards, if we take the proportionate numbers of 1871 as 100, the old men have increased to 187, and the old women to 250; or, roughly

speaking, the old men have nearly doubled in numbers in relation to the whole community, while the old women have far more than doubled. A large part of the increase in cancer is explained in this simple way.

The study of age incidence gives other valuable information. Not only is the death rate from cancer in persons under 25 very small, but since 1880 it shows no increase, the rates per 10,000 living beings 0·11 for 1870-72, 0·18 for 1880-82, 0·19 for 1890-92, and 0·17 for 1900. The rates for children under five have decreased from 0·22 in 1870-72 and in 1880-82 to 0·19 in 1890-92, and 0·17 in 1900. Thus the definite conclusion is reached *that cancer in children and young people is not increasing.* We may turn aside for a moment to study the history of sarcoma in more advanced life. *Sarcoma in males above 25 has slightly decreased since 1870,* although the tumours of old people have come to bulk more largely in the schedule. In females there has been a decided increase, to a rate slightly higher than that of males. But, evidently, there was some fault in the diagnosis of female cases in former time, and even more than with males there has, of late years, been more frequent recognition of sarcoma in old people. The common belief that sarcoma is pre-eminently a disease of childhood is very erroneous. It is the only form of malignant tumor affecting young persons; but, in 1900, estimated in the manner just described, the sarcoma rates per 10,000 living in each age period were only 0·06 for males and for females under 25, while the rates for those of 75 and upwards were 3·80 for males and 7·4 for females, and it may be noted that no case of ovarian cancer was recorded at this advanced age.

Reverting to our main argument, we find that in the age periods from 25 to 35 and from 35 to 45 the cancer rates (including sarcoma) have fluctuated from year to year, though there is no definite increase. While recorded cancer shows no definite increase in persons under 45, there is a progressive increase above that age by 42 per cent. between 45 and 55, by 86 per cent. between 55 and 65, the rates being more than doubled between 65 and 75, and nearly trebled from 75 upwards.

Comparing the sexes, we find that the total female rate was higher than the male in 1870-72 and in 1880-82, but lower than the male in 1890-92 and in 1900. At the present time the female rate is slightly above the male from 25 to 35, and double the male from 35 to 45, though not itself increasing in this decade. It is higher than the male from 45 to 55 in the

proportion of 17 : 12, about equal to the male from 55 to 65, slightly less from 65 to 75, and eight per cent. less from 75 upwards.

But some startling figures appear when the male and female statistics of 1870-72 are compared with those of 1900. The male rate has increased much more rapidly than the female between the ages of 45 and 55, and slightly more rapidly in the two following decades; but, from 75 upwards, while the male rates have been multiplied by $2\frac{1}{2}$, the female rates have been multiplied by $4\frac{1}{4}$. If we concentrate our attention on persons of 75 and upwards, we find that the increase has been steadily progressive. Here is the crucial question: Do these figures, and particularly those relating to females, represent a real increase in the prevalence of cancer, or a more regular recourse to medical advice, better diagnosis, and more explicit registration of the cause of death? Undoubtedly, with the material progress of these communities, the aged, and particularly the aged women, have better and more regular medical attendance, and the prejudice against a record of cancer in death certificates is decreasing. Further evidence, however, is afforded by the comparative records of the several States, marked discrepancies in their cancer histories pointing to better diagnosis and more explicit registration as the chief causes of the apparent increase of the disease. Still further information is available in the details of organ incidence. In Australasia, as elsewhere, the most notable feature is the frequency of cancer in the uterus and female breast, which contribute 23·7 per cent. and 9·6 per cent. respectively to the total cancer mortality in females. Cancers of the tongue, pharynx, larynx, œsophagus, stomach, pancreas, and urinary bladder are more common in males, while the intestine is affected almost equally in the two sexes. The liver suffers somewhat more often in women, doubtless, in the main, through secondary infection from the breast or elsewhere. The face, lip, jaw, and glands of the neck suffer much more in men. On the whole, in Australia men suffer slightly more often than women; but, if the generative and mammary systems be excluded, males suffer in great excess, the rates per 10,000 living being, approximately, 5·96 and 3·52.

If we study the apparent changes in prevalence during the past thirty years in the domain of organ incidence, we find that the stomach rate has doubled in both sexes, while the liver rate has trebled in men and nearly quintupled in women. Cancer of the intestine (not including the rectum), has

quintupled in men and increased seven fold in women, the rectum rate having trebled in women, while in men it has increased tenfold. In men, also, the tongue rate has nearly doubled, the throat rate trebled, the bladder rate nearly quadrupled, and the pancreas rate multiplied seven fold. These rates of increase seem to bear some proportion to the difficulty of diagnosis. But, on the other hand, the face rate in males is less than it was twenty years ago. The lip rate in males has fallen from ·068 in 1870-2 to ·047 in 1900, though in females it has increased to one-third of the male rate. Infinitely more important; the uterus rate shows only a slight increase (from 1·13 to 1·29 per 10,000 females living), and the female breast rate, after increasing somewhat, now stands lower than in 1870.

But the meaning of these changes is not fully apparent till we study the organ and age incidence together. I have selected for special presentation (a) cancer of the head, face, nose, and lips in males; (b) cancer of the tongue in males; (c) cancer of the stomach in males and in females; (d) cancer of the liver in males and in females; (e) cancer of the breast in females; and (f) cancer of the uterus. It will be found that in the head, face, nose, and lip, the only notable increase is in persons of 75 and upwards. In the tongue there is a slight increase from 45 to 55, more decided from 55 to 65, and a slight increase from 65 upwards. In the stomach there is a slight increase from 45 to 55, more decided from 55 to 65, especially in women, and very decided from 65 upwards, especially in women. In the liver the increase is greater than in the stomach, but affects the age period in much the same way. In the female breast there is a total decrease, but there is an increase by one-third between 55 and 65, and by less than a third from 65 upwards. In the uterus there is a decrease under 55, a slight increase from 55 to 65, a more than fourfold increase from 65 to 75, and also from 75 upwards. The uterine rates, which were peculiar in having an early maximum, have now assumed the usual cancer type, the rates per 10,000 increasing with every decade into old age.

General Conclusion.—While I am not prepared absolutely to deny that there has been any increase in the prevalence of cancer, I can state positively that malignant tumours in young people show no recent sign of increase; that among the external cancers, which are easily recognised, those of the face and lip in males appear to be less frequent than formerly, while cancer of the breast in women has also decreased; that uterine cancer has only slightly increased,

the rates for women under 55 being lower than they were thirty years ago; that the apparent increase of cancer is most marked in old people, and particularly in women of 75 and upwards; and I am strongly of opinion that most of this apparent increase is fictitious, being due partly to changes in the age distribution of the population, and partly to more regular medical examination, better diagnosis, and more explicit registration.

Comparison of Australasian with English Rates.—If we finally compare the cancer statistics of Australasia with those of England and Wales, it is found that the Australasian rates are decidedly lower for male and for females, and this both for all ages, and at almost every period of life except for persons of 75 and upwards. The rates for England and Wales were higher in 1899 than ever before, the general rate being 8.29 per 10,000 living, the male rate 6.72 and the female rate 9.77. When the generative and mammary systems are excluded, the female rate in England and Wales is only slightly less than the male. These proportions between the sexes contrast strongly with those which obtain in Australasia, where the total female rate is less than the male, instead of being nearly half as large again; and where exclusion of the generative and mammary systems brings the ratio of the female rate to the male rate down to, approximately, as 10:17. In England and Wales, as in Australasia, the cancer rates increase from middle life into old age. While the total rates in England and Wales have increased from 4.46 in the period 1874-75 to 8.29 in 1899, the Australasian rates have increased from 2.75 in 1870-72, to 5.72 in 1900.

CANCER DISCUSSION

Dr. VERCO (Adelaide) read a paper on the South Australian statistics as to the disease; but explaining that when he prepared his paper he did not know that Professor Allen would deal with the statistics of all Australasia. As to the prevalence of the disease in South Australia, between 1874 and 1900 there had been 3,282 cases; average per million, 382 of all ages; the death rate was 60 per cent., during that period, of that of the old country. He concluded that cancer rapidly increased with advancing age. New methods of comparison raised the percentage from 60 per cent. to 82 per cent. as compared with the old country. Among men the mortality in South Australia from cancer was slightly higher than in England and lower as to females. Up to date statistics showed a marked freedom from cancer among

South Australian women as compared with those of the old country. As to cancer on the whole, in that State there was a decrease in the number of deaths registered. Their statistics showed a rapidly increasing liability to cancer with advancing age. Many cases of cancer declared themselves to the laymen, but others could not be diagnosed by the most skilled of scientists. The more scattered a population the fewer were the cases of cancer registered. There was nothing to explain in connection with male mortality, unless the slightly increased rate was attributed to a greater accuracy in diagnosis; but what did require elucidation was the apparently marked freedom of women from cancer. A peculiar feature of statistics was the smallness of the death-rate from cancer among women in South Australia. At Frankfort-on-Maine, where the statistics were probably kept with accuracy, the death-rate among women was 50 per cent. higher than among men, and in Great Britain and Ireland 45 per cent. higher. What, then, did this low female mortality among women in South Australia mean? Whatever might be the solution of the low death-rate among women, the conclusion was forced upon them that South Australian women—and he was glad to find that it meant Australian women generally—enjoyed a decided immunity from cancer as compared with their sisters on the other side of the world.

Dr. W. CAMAC WILKINSON (Sydney) read a paper on the "Etiology of Cancer." The subject of cancer had a very melancholy interest for the physician as well as the layman. Whatever success might have been achieved in other fields of science, cancer was the one disease which baffled and set at defiance the efforts of the medical profession. In other diseases the greatest advances had been made by a closer study of the etiology of those diseases. The best prospects of success in dealing with the important question of cancer, especially with regard to its treatment and prevention, was to obtain a better understanding of its origin and nature. Whether the increase in cancer was real or apparent, no one had the hardihood to assert that it was diminishing. The extent of cancer could be measured by the various deaths that took place. In Tasmania there had been very little increase since 1870. Females suffered more than men from cancer, between the ages of 55 and 60, but after the age of 60, males suffered more than females. Occupation appeared to have some effect on cancer, and clergymen occupied the best position, and chimneysweeps the worst. As he had

previously remarked, statistics showed that there was an increase in the number of cases of cancer. It was for them to consider if that increase was real or apparent. It was no use saying actuaries and statisticians were wrong; they were right according to their own methods. If they were wrong it was due to the fact that incorrect data were supplied to them. If medical men could not settle the question no body of men could settle it. Medical men were blamed for not knowing more, but false, morbid sentiment often stood in the way of research. The view was now held that the growth of cancer was altogether independent of the tissue invaded. A proper system of research required not only post-mortem examination, but also histological investigation. He quoted the opinions of eminent authorities with regard to the cause of cancer. Benign tumours, although large, did not have a bad effect on the blood, but malignant tumours, no matter how small, did affect the blood. There were great gaps to be yet filled in before it would be possible to declare that cancer was due to a parasite. If it was found that cancer was due to a parasite, something might then be done to arrest its progress, and he hoped that the efforts of the scientists at present engaged in the work would be successful.

Dr. SYDNEY JAMIESON (Sydney) read a paper on "The part played by injury, chronic irritation, and inflammation, in the production of new growth." After dealing with the occupation of those attacked, Dr. Jamieson instanced cases in which cancerous growths attacked injured tissues; examples of new growth following upon chronic irritation and inflammation were then instanced, many examples being seen of tumours arising at points which were the seats of chronic inflammation; epitheliomata not infrequently were found growing in the edges of chronic ulcers. Innumerable cases could be instanced where long continued irritation and inflammation had been associated ultimately with cancer formation. In conclusion, he said by taking means to prevent inflammatory attacks from becoming chronic; by adopting skin grafting to a greater extent in the healing of burns and ulcers, and by as far as possible relieving the tissues from the baneful effects of prolonged irritation, they would, he felt sure greatly reduce the incidence of new growth.

Dr. TODD (Adelaide), read a paper on "The desirability of removing the chain of glands near its growth." He believed the limits of curing cancer by the knife had been reached; yet at present the principal hope was that the surgical

treatment of cancer would not be regarded as a last resort, but as a means for actual cure.

Professor ALLEN (Melbourne), read a paper prepared by Dr. F. D. Bird, of Melbourne, on "The general results of radical operation." He dealt with the disease from the point of view of the practical operating surgeon. He pointed out that the many varying forms of disease which are grouped under the term "cancer" are so numerous, and so different in their structure and effects that it would be well-nigh impossible to describe them all within the limits of a single paper. The almost utter hopelessness of the surgeon of 50, or even 20 years ago, in the presence of this disease contrasts strongly with the confidence of the more sanguine surgeon of the present day. With regard to the prospect of the cure of cancer by operation, it lies, nowadays, somewhere between these two extremes. The older surgeon, with his crude, imperfect operations, undoubtedly cured some cases, whereas the modern surgeon, with all his latest improvements, fails to bring about a cure in a great many instances. Nevertheless, in few branches of the doctor's art have the chances of complete cure been advanced so much. Mr. Bird quoted Sir William Banks, who asks the question as to what would be the result if every cancer were operated upon when it was of very small size? To bring this happy result about, the public must be gradually educated up to the fact that a larger number of cancers are perfectly and permanently curable, if only surgical relief is sought at an early stage. It was pointed out that in some cancers, easily accessible to the surgeon's knife, the percentage of actual cures had lately been gradually rising from two or three to 20 and 30 and lately even to 55 per cent., and this, too, in spite of the fact that many cases are now operated upon which would formerly have been left to their fate. How many cases of cure can every operating surgeon call to mind, which, to all appearances, hardly justified an operation, owing to the advanced stage of the disease. On the other hand, the surgeon to-day is often persuaded to operate, when his surgical instinct tells him that surgery can scarcely avail anything. Sometimes, to his delight and that of his patient, even here he scores a genuine and unexpected success. To surgeons in the past, all cancer cases seemed almost hopeless; to-day there are cases—unpromising, truly—but far fewer cases can be labelled absolutely hopeless. This is a great and encouraging advance. No surgeon can say decidedly whether a case is favourable or not. The only fear is that of

recurrence after removal. Sometimes, even when a cancer returns several times after removal, it can be ultimately cured by repeated operation. These are strange and rare instances of the disease, but every surgeon has seen many of them. The disease seems, in fact, after a time, to wear itself out. Now-a-days, the presence of what is known as the "Cancerous Cachexia" is not necessarily a bar to operation. On the contrary, it very often is an indication for it, and it is surprising how quickly a cancerous patient will regain health and strength after the focus, or poison centre, of his disease has been removed. Thus they had a number of rational inducements to operate, a number of subsidiary reasons for using the knife, but the grand inducement—the overpowering reason for operating—is that, in a number of cases, they could cure the patient outright. The prominent note of the paper was one of hope for further successes from surgery in the near future, as the public becomes alive to the importance of applying for relief early in the disease. There was also hope for the surgeon, who must bear in mind the fact that, however unpromising the case may appear, he has a reasonable chance of curing his patient by a thorough and complete removal.

A paper, taken as read, on "Some Aspects of Cancer," was submitted by Dr. W. M. Stenhouse (Dunedin), contending that cancer was mainly a disease of old age, and was due to the loss of some power or property which, in earlier years, constituted a protection; instancing however, a case of sarcoma of the kidney in a young, healthy woman, with excellent family history, and no obvious cause. Dr. Stenhouse was not disposed to attach great importance to heredity, but laid great stress on nervous or moral shock, and quoted cases illustrating the rapid development of cancer in such circumstances.

Dr. A. W. FINCH NOYES (Melbourne) submitted a paper, with statistics on cancer records for the principal hospitals of Victoria. His analysis comprehended 3,936 cases of carcinoma and sarcoma, extended over 20 years, and collected from the principal hospitals of Victoria. He showed that there was an increase in cancer, which exceeded the increase of population. The greater accuracy of diagnosis, helped by the more thorough microscopical examination of doubtful growths, and the greater frequency of *post-mortem* examinations, tend to swell the numbers. Many cases, too, are now admitted for surgical treatment, which in the past, would have been turned away as inoperable, but these factors alone cannot wholly account

for the increase of cancer cases. The paper gave an interesting analysis of the sex, type of new growth, organ involved, and occupation of the victims of cancer.

A paper was taken as read, prepared by Mr. T. A. Coghlan, New South Wales Government Statistician, on "The causes of the increase or alleged increase in cancer, examined in the light of the statistics of New South Wales, since 1856." He discussed the question of the increase of cancer entirely from a statistical point of view, limiting observations to the statistics of New South Wales. As regards the alleged increase of cancer there has been much controversy. It is alleged that the increase in the cancer figures is due to an alteration in the age constitution of the people, and to the fallacious mode of referring cancer deaths to the whole population rather than to the age groups, cancer being mainly a disease of adult ages. This contention is disposed of by a comparison of the deaths in age groups with the number of persons exposed to risk in those same groups. By this the statistics unmistakably show that, taking a term of years for comparison, there has been an increase in the rate in each group. In the past ten years, a period during which it is not claimed that any great improvement in diagnosis has taken place, the increase of cancer has been very considerable for both sexes and for all ages, the only exception being for females in the age group, 25 to 34. In this group there has been a slight decline in the number of deaths compared with the population. Improved diagnosis does not, therefore, account for the increase of the cancer figures.

Professor ALLEN replied. He said it might seem strange that no free discussion should follow. But he thought that was one sign of the great truth that the work of a medical congress lay more in the private communications between members than in the public transactions of the Congress. They learned more by coming together, man to man, and comparing their thoughts and experiences than by getting upon the platform and making set speeches. He believed that the bringing up of the subject of cancer would not be a fruitless thing. It would bring forth fruit. If it stimulated investigation and led to the avoidance of difficulties and errors met and committed in the past they might arrive at some substantial results. He thanked the Congress for the attention given to his very long paper. And yet it was only in the nature of a sketch. He had much more material available than he had submitted to the Congress, but he had given his own main impressions. He had not seen any reason to

change his conclusions as to the origin of cancer, and he did not put them in any dogmatic way. There was room, both for those who held the parasitic theory and those who did not. He himself would gladly welcome a proof of that theory, which would bring hope in the future. One of the chief authorities cited in favour of the parasitic theory did not contend that he had proved the parasitic nature of the disease of cancer. Another authority mentioned dealt with yeasts; but all their experience would lead them to say that such vegetable organisms did not produce the phenomena of cancer either locally or in dissemination. Having referred to other parasites, Professor Allen went on to say that with regard to statistics Dr. Verco had pointed out sources of error. Statistics were very apt to lead one astray. But when, for example, one found in these colonies the striking fact that women suffered so much less than men they could not ignore the figures. The figures for 1900 were not so satisfactory as they might be, owing to the noncompletion of the census. In two or three years' time more definite information would be available. It was to be hoped, however, that steps would be taken to obtain some united forms of record and establish some nomenclature of cancer. Mr. Coghlan spoke of external cancer, but he meant accessible cancer, including cancer of the throat. Cancer in the face and lips of males had not increased; cancer of the breast in women stood lower than it did 30 years ago. He himself had brought up his figures in a simple way. He hoped the Government Statists would keep this matter going, and not allow it to drop, and analyse it to the utmost. Then they might find the totality of result most valuable. With regard to treatment, all must be agreed that immense progress had been made; but they had also to fear whether there had not also been unwisdom, as well as wisdom in some of the advanced methods that had been used.

Dr. WOLFHAGEN, on behalf of the executive, moved a hearty vote of thanks to Professor Allen for the trouble he had taken in preparing such an able paper to open the discussion, and also to the other gentlemen who had taken great pains in preparing most interesting and instructive papers. To the Government Statisticians they were also deeply indebted.

The motion was passed amid applause.

The Estate of the late Sir William MacCormac.—The value of the estate of the late Sir William MacCormac, Bart., F.R.C.S., formerly President of the Royal College of Surgeons of England, has been proved at £22,812 5s. 6d.

A PRELIMINARY NOTE ON THE SERUM-THERAPY OF SNAKE-BITE.

By Frank Tidswell M.B., Ch M., D.P.H., Principal Assistant Medical Officer of the Government, and Microbiologist to the Board of Health, N.S.W., Sydney.

(From the Microbiological Laboratory of the Board of Health, Sydney).

By the courteous permission of the President of the Board of Health, I am enabled to publish the present preliminary note in anticipation of an official report dealing with the general subject of snake-bite in this State.

In February, 1894, Phisalix and Bertrand, and A. Calmette announced almost simultaneously that animals could be rendered immune to snake venom, and that the blood serum of such animals was possessed of curative properties. These statements were confirmed by the investigations of T. Frazer, an account of which was published in the following year. Some observations on the same subject were made by Sewell and A. A. Kanthack, but its more recent development is mainly due to the researches of Calmette. This able observer has carried his labours to the point of elaborating and placing upon the market the product now well-known as "Serum Antivenimeux" anglicé "antivenine."

Although this serum is prepared by treating horses chiefly with cobra venom, smaller quantities of other venoms are additionally used, and Calmette claims that the serum obtained is active against the venoms of all species of snakes. It is specifically stated to have been tested against the poisons of the cobra and trimeresurus of Asia, the naja haie and cerastes of Africa, the crotalus of America, the bothrops of the West Indies, the viper of Europe, and the pseudechis (black snake) and hoplocephalus (tiger snake) of Australia.

Partly from a knowledge of differences in chemical composition and physiological action between the venoms of different species of snakes, and partly as the result of practical experience, this sweeping assertion of the all-round efficacy of the serum has not received acceptance. As regards Indian serpents, Lamb has found that whilst the serum is capable of neutralising the effects of cobra venom, it possesses no potency against daboid venom. Observations made in this country have also failed to support Calmette's contention. In some unpublished experiments made in this laboratory in October, 1896, the serum

proved unable to preserve the animals against tiger snake venom, and similar negative results were reported by C. J. Martin in August, 1897, this observer then expressing the opinion "That Calmette's conclusions regarding the value of the serum of an animal immunised against cobra venom as a protection against other venoms are, as they stand, untrue, and require considerable modification." Subsequent experiments performed in this laboratory have, unfortunately, only confirmed the view that Calmette's claim cannot be admitted as regards Australian snake venoms.

There is no need in this place to enter more deeply into the explanation of this lack of success than to point out that curative serums are essentially specific, acting, as a rule, only or only effectively against the toxins with which they have been prepared; and that, amongst other things, there are differences between the effects of cobra venom and tiger snake venom, such as might serve to explain why a remedy, applicable to one, proves ineffective against the other. As already stated, the venom used by Calmette for the preparation of the serum is chiefly cobra venom. But other venoms are mixed with it, and, by consequence, the serum is not strictly adapted for the settlement of this question of specificity. It is necessary for this purpose to possess a serum prepared with one single kind of venom, and to test its efficacy against the same and other kinds of venom. Researches with this object have been carried on in this laboratory during the past three or four years, and have now resulted in the immunisation of a horse, and the acquisition of a serum fulfilling the conditions just mentioned.

The venom selected for the immunisation of the horse was that of the tiger snake (*Notechis scutata* vel *hoplocephalus curtus*), this choice being determined by the consideration that should an effective serum be obtained it would be serviceable in the treatment of the bites of the most dangerous of our snakes. The venom was taken directly from living snakes kept in the laboratory, the reptiles being made to bite and eject their venom into a watch-glass covered with thin rubber sheeting, which the poison fangs alone penetrate. By this means the venom is obtained free from saliva and from any adventitious products which might be squeezed or dissolved out of excised glands. The pure venom was thoroughly dried over calcium in desiccators, and preserved in phials for use as required. Venom so prepared has been obtained from the black, brown and tiger snakes, and from the death adder. For injection the venom was dissolved in 9 per cent. saline solution.

The horse subjected to the immunisation was a sturdy, well-nourished creature, incapacitated from ambulance service only by reason of a sprained shoulder, which induced lameness on continued work. Throughout the treatment this animal has remained fat and sleek, his general excellent health being only temporarily disturbed for brief periods after the injections of venom.

The treatment was commenced on June 7th, 1898, by the subcutaneous injection of .0005 gramme of the venom. This was repeated in a week, and a week later the dose was increased to .00075 gramme. Increments of .00025 at each dose were maintained during the first six months of the treatment, but after that they were raised more rapidly: e.g., by .0005 (January, 1899), .01 (March, 1899), .05 (May, 1899), and .1 (January, 1901,) gramme. The increments were pretty regularly given, the same dose being repeated only on rare occasions when the reaction was more than usually pronounced. Between October, 1899, and May, 1900, the pressure of other work interfered with regular treatment, but otherwise the horse was injected once a week (June, 1898, to April, 1899); once a fortnight (May, 1899, to May, 1900); and once a month (July, 1900, to January, 1902.) The lengthening of the intervals was due to the difficulty of collecting the larger amounts of venom required as the dose increased. This same difficulty has limited the maximum dosage to .6 gramme, which was reached in April, 1901, and which it has not been possible to more than approximately maintain to date. During the period of 3½ years covered by the treatment the horse has received a total quantity of about 10 grammes of pure tiger-snake venom. It may, perhaps, be pointed out that the dose which the horse now bears without effect (.6 gramme) is about equal to the aggregate yield of 21 or 22 average snakes, and that the total amount received by the horse during the treatment (10 grammes) is about equal to the amount which would be yielded by 333 average snakes.

The serum used in the experiments about to be described was obtained at two bleedings performed on May 5th, 1901, and October 9th, 1901. The horse was bled in the usual way from the jugular vein by means of a trochar and cannula. The subsequent manipulations up to the distribution of the serum into small sealed tubes are fully described in the general report, but need not detain us here. Suffice it to say, therefore, that from first to last the serum is entirely preserved from any risk of contamination, and is finally obtained perfectly pure

and perfectly sterile, and without added anti-septic of any kind.

The efficacy of the serum was tested in the usual way by determining the amount required to neutralise the effects of a known amount of venom upon test animals. The experiments were performed by injecting mixtures of venom and serum into rabbits. In order to prevent the misleading inferences which might result from partial neutralisation, the amount of venom given was 10 times the quantity required to kill the rabbits. As the result of a long series of observations, which, indeed, have not yet been carried to finality, it was found that the following quantities represent approximately the smallest doses which on subcutaneous injection could be relied upon to certainly cause the death of the rabbits:—

Tiger snake venom, .00005 gramme per kilo of rabbit
Brown snake " .0002 " " " "
Death adder " .0003 " " " "
Black snake " .0006 " " " "

These amounts are, therefore, what may be called the minimal lethal doses of the venoms. The tests were made with 10 times the above-mentioned quantities, to which were added different amounts of serum, and the solution injected immediately after mixture to avoid any chemical changes that might occur after long contact.

In the first series the mixtures were injected subcutaneously, and the results obtained with the four different kinds of venom tested are briefly expressed in the following tabular statement:—

Kind of Venom.	No.	Per kilo body weight.		Result.
		Venom in grammes.	Serum in cubic centimetres.	
Tiger Snake Venom.	1	.0005	.005	Died.
	2	"	.01	"
	3	"	.05	"
	4	"	.1	"
	5	"	.2	"
	6	"	.3	"
	7	"	.4	Survived
	8	"	.5	"
	9	"	1.0	"
	10	"	2.0	"

Black Snake Venom.	1	.006	.4	Died.
	2	"	1.0	"
	3	"	2.0	"
	4	"	4.0	"

Brown Snake Venom.	1	.002	.4	Died.
	2	"	4.0	"

Death Adder Venom.	1	.002	.4	Died.
	2	"	4.0	"

It will be seen from this table that .4cc. of the serum per kilo. body weight sufficed to protect against the tiger snake venom, whereas ten times this amount, viz., 4cc., failed to protect against the other venoms tested. It is obvious, therefore, that, although an effective serum has been obtained, its action is specific, being operative only against the particular kind of venom used in its production.

From the fact that .4cc. of the serum proved effective against the tenfold lethal dose of .0005 gramme of the venom, it was to be inferred that .04cc. would protect against the single lethal dose of .00005 gramme of the venom. The validity of this inference is demonstrated by the data contained in the following table, expressing the results of two confirmatory experiments in which were used the single lethal dose of venom, and equivalent quantity of serum:—

No.	Per kilo. body weight.		Result.
	Venom in grammes.	Serum in cubic centimetres.	
1	.00005	.04	Survived
2	"	"	"

It is therefore concluded that .04cc. of the serum is the quantity which will entirely neutralise the effects of .00005 gramme of tiger snake venom, the two being measured per kilo. of rabbit, and injected subcutaneously immediately after their mixture in vitro.

By a further series of experiments, it was ascertained that this same value for the serum held good when the mixtures were injected directly into the veins of rabbits. As a preliminary, it was necessary to determine the certain minimal lethal dose of venom for this method of administration. The series of experiments performed to this end gave .000005 gramme of tiger snake venom per kilo as the smallest that could be relied upon to cause death after intravenous injection into rabbits. As in the previous experiment, ten times this minimal lethal quantity was used as the

standard dose of venom. It will be observed that the minimal lethal intravenous dose of the venom happens to be one-tenth of the minimal lethal subcutaneous dose; consequently, in making the tests the serum pitted against it was correspondingly reduced. The following table shows the results obtained by injecting mixtures of '00005 gramme of tiger snake venom and '04 cc. of serum per kilo of the body weight into the jugular vein of rabbits:—

No.	Per kilo body weight.		Result.
	Venom in grammes.	Serum in cubic centimetres.	
1	'00005	'04	Survived.
2	"	"	"

That these results apply also when single doses are used is shown by the results expressed in the following table:—

No.	Per kilo body weight.		Result.
	Venom in grammes.	Serum in cubic centimetres.	
1	'000005	'004	Survived.
2	"	"	"
3	"	"	"

It will be seen, therefore, that the serum is, at least, no less efficacious when the mixtures are injected intravenously than when they are injected subcutaneously. Taking the two series of results together, it becomes clear that as mixed and tested upon rabbits in the manner described, '04cc. of the serum possesses the power of neutralising the effects of '00005 gramme of tiger snake venom, irrespective of the mode in which the mixture is administered.

By way of completion, attention may be called to corresponding experiments performed with Calmette's serum and tiger snake venom, the results of which are shown in the table on the next column.

In these experiments every advantage is given to the serum by the use of only single lethal doses of the venom; nevertheless the results failed to indicate the possession of the power of even partial neutralisation, although the subcutaneous dose of Calmette's serum reached 100 times, and the intravenous dose reached

1000 times, the efficient quantity of the serum locally prepared by means of tiger snake venom.

Mode of Administration.	No.	Per Kilo Body Weight.		Result.
		Venom in Grammes.	Serum in Cubic Centimetres.	
Subcutaneous injection of Single Doses.	1	'00005	'04	Died
	2	"	'4	"
	3	"	4.0	"
Intravenous Injection of Single Doses.	1	'000005.	'004	Died
	2	"	'04	"
	3	"	'4	"
			4.0	"

From the series of observations just considered, it will be apparent that whilst the serum prepared in this laboratory with tiger snake venom possesses a high neutralising potency against this same venom, it utterly failed to exhibit appreciable protection against the venoms of the brown and black snakes and that of the death adder. To extend the series of observations, I have forwarded a quantity of the serum to Captain G. Lamb, of the Parel Laboratory, Bombay, who has kindly consented to test it against the venoms of Indian snakes. In the meantime, the outcome of the experiments already performed is such as to indicate that the serum is specific in its action, operative only against the venom by means of which it was prepared. In view of this issue, it seems reasonable to suppose that the value of Calmette's serum against cobra venom, and its lack of efficacy against daboia and tiger snake venoms are to be explained on the grounds of specificity. However much in keeping with scientific theories and beliefs, this specificity is unfortunate from the point of view of practical serotherapy, since there is the prospect that we need a special serum for each kind of snake. Whether or not this complication can be overcome by immunisation with a judicious mixture of venoms must be left for the future to decide.

In conclusion, it may be pointed out that the experimentally ascertained neutralising potency of the serum prepared in this laboratory by no means indicates the degree of its possible value for the treatment of tiger snake bite in practice. The establishment of this point is beset with difficulties, and the observations so far made with respect to it are too

incomplete to permit of any valid inference. However, the work is in progress, and I hope to be in a position to make some further communication upon this subject in the course of a few months.

Sydney, April 11th, 1902.

NOTES ON A MILK EPIDEMIC OF TYPHOID. ILLUSTRATING THE DURATION OF INFECTIVITY.

By James Jamieson, M.D., Health Officer,
City of Melbourne.

As is often the case with new knowledge, the gaining of more exact information about the intimate nature of the acute infective diseases, seems for a time to bring in almost as much doubt as certainty. It may be, of course, that the old supposed certainty was based on real ignorance, and that the new doubt marks only a temporary halting-place on the path of scientific progress. This is notably true in the case of diphtheria. For, while exactness has been given to diagnosis by the discovery of the bacillus of Loeffler, it is also true that in cases which look like diphtheria clinically, the real bacillus may not be found, and further, that the bacillus is not uncommonly discovered where there are not clinical signs of the disease. In respect of prophylaxis the gain is unmistakably great.

With regard to typhoid the present position is distinctly an interesting one. The relation of Eberth's bacillus to the disease is definitely accepted, although the distinctive characters of the organism, as against varieties of the Colon bacillus, are not easily definable. It is especially, however, in respect to the duration of the period of infectivity, that fresh light was needed, and has to some extent lately come. It is owing largely to the strenuous advocacy of Budd that the doctrine as to the spread of infection mainly, if not solely, by means of the stools of patients suffering from the disease came to be almost universally accepted. The demonstrated presence of the bacillus in the structures of the intestinal wall, and in the faecal contents went to establish the contention of Budd and his followers, which had been based on practical observation. But difficulties arose, and there came to be agreement among bacteriologists that, while the bacillus is very frequently discoverable in the faeces at an early stage of the disease, it is difficult or impossible to identify it at a later period. That being so, the old question about the length of time during which the stools of typhoid patients

may be the means of spreading the disease was evidently not made easier of solution—at least for the time. And the question has always been answered in a somewhat uncertain way. The infective period was supposed to last till the temperature had definitely fallen to the normal point, till convalescence was established, or till an assumed ulceration could be supposed to have healed up finally. Clearly there were uncertainties in all these respects, and so authorities had a way of avoiding positive expressions of opinion on this most important point. As it became known that the bacillus either ceases to occur in the faeces, or can with difficulty be detected, it was also clearly shown that it may remain lodged in the body for quite long periods after recovery from an attack of the disease. In his Goulstonian lectures, published in the *Lancet* in March and April, 1900, Dr. F. Horton-Smith discussed very fully the evidence as to the persistence of the bacillus after recovery and notably in the urine. His own observations showed that the urine may contain the bacilli, in enormous numbers, at least as late as the seventieth day of the disease, and he makes reference to a case in which they were believed to have persisted for several years. His own belief was that seventy days by no means marked the maximum duration. In the present state of our knowledge, therefore, we seem to be driven to the opinion that the disease is more liable to be spread by contaminated urine than by faecal discharges, especially at a late period of an attack, and even after apparent establishment of full convalescence.

But though observations such as those recorded by Dr. Horton-Smith and others carry conviction to a very large extent, it is both interesting and important to get evidence of actual infection, as helping to fix the duration of the period of infectivity.

A series of cases occurring among the customers of a dairy in the City of Melbourne, supplies some points of interest in this connection. S.B., the keeper of the dairy was removed to the hospital on 6th December, 1900, on what was considered to be the sixth day of his illness. He remained in hospital till the 15th day of January, 1901, the trade having in the meantime been carried on, after precautions taken, and without any consumers of the milk having been reported as affected. He went home from the hospital, and declared that he did no work about the dairy for several weeks. On the 11th of March the first of a series of six cases was reported, the others occurring in pretty rapid succession.

The calculated dates of attack were the 4th, 5th, 11th, 12th, 19th, and 21st March, the last case being that of a brother of the proprietor who lived and worked on the premises. In the time which elapsed between the first and last of these notifications, only sixteen other cases were reported from the whole district with a population of about 67,000. There was another circumstance which made more definite the attribution of the outbreak to the milk supply. A list of the customers was obtained shewing that 154 households were supplied, and it was found that in most instances the milk was scalded before delivery, but that 22 householders preferred to obtain the milk fresh. All the cases outside of the dairy occurred among persons belonging to these households.

In various ways the history of this small outbreak was an interesting one. The man who is assumed to have distributed the infection had not an unusually severe attack, judging from the period of stay in hospital, though his ability to take up work was delayed by an attack of pleurisy. His illness apparently began on 1st December, and the last cases among his customers occurred on 11th, 12th, and 19th March, so that even allowing fourteen days of incubation, full three months elapsed between the beginning of his illness and actual infection in these cases. As soon as suspicion was excited, precautions were at once taken, and when the second case occurred on 21st March, these were renewed, and the outbreak, so far as concerned this focus of infection, was at an end. And warning was further taken, and return to work on the part of this patient was prohibited for three months after discharge from the hospital. This was, perhaps, a straining of powers, since the maximum time of seclusion, contemplated by the Victorian Health Act, is fixed at three months. It is not stated, of course, at what date or stage of illness the period of three months begins to count, and advantage may thus be taken of this vagueness. With the knowledge we now have of the duration of infectivity, in more than one of the infectious diseases, it is apparent that the limit of three months, whether from the beginning of the attack or from the establishment of convalescence, does not err on the side of over-strictness.

[Read at the Intercolonial Medical Congress at Hobart.]

At the meeting of the Benevolent Asylum (Melbourne) committee on April 4th, the chairman said the committee should consider what should be done in the matter of the £25,000 legacy recently left to the institution by the late Mr. J. Hingston. The committee should decide whether the building was to be removed from its present site or not. It was decided that the matter be considered at next meeting.

CASES OF GASTRIC FISTULÆ.

R. Humphrey Marten, M.B., B.C. Cantab.,
M.R.C.S. Eng., L.R.C.P. Lond., Adelaide.

CASES of gastric fistulæ are apparently not of frequent occurrence. Sydney Martin, in his book on "Diseases of the Stomach," does not mention their existence, but Robson and Moynihan in their work on the "Surgery of the Stomach" devote a chapter to the condition. The fistulæ may be internal, i.e., between the stomach and some other abdominal or thoracic organ, or open externally. They are either traumatic or due to a perforating ulcer, simple or malignant. I am doubtful whether my first case should come under the heading of this paper, as I made an opening myself into a subphrenic abscess which afterwards became a fistula. The history of the first case is as follows:—

Miss G., *æt.* 25, from Grunthal, who had consulted me several times previously for anæmia, called on February 6th, 1899, and it was then noted that she looked ill, and complained of pain in the left hypochondriac region, made worse by taking food or breathing. She came again on March 1st, and was then much better. Dr. C. Mainwaring saw her for me on April 13th, and she then complained of pain after food and between her shoulders, but no vomiting. She was brought down on April 27th, having driven 18 miles in a buggy. She was greatly collapsed, with a feeble, thready pulse, and a dusky expression and a temperature of 103° F., and gave a history that, whilst vomiting the night before, she had experienced a sudden, violent, pelvic pain. The breathing was so difficult that I was afraid she would die in my consulting room, and I had the greatest trouble in persuading her friends to leave her in the private hospital, as they were most anxious to take her back the long drive.

Dr. Poulton saw her with me in the afternoon, and we found the abdomen distended and tender over the region of the appendix, and although we did not think the symptoms pointed altogether to a perforation of that organ, we bore that in mind. She recovered from the collapse and the abdominal distention gradually receded, but never actually flattened. The temperature rose each night to 101° F. or 102° F., and on May 4th she developed a parotitis on the right side, followed by a similar condition on the left; these went down, but her temperature still remained high at high.

On May 9th there was tenderness below the left rib cartilages, and I thought a fullness; but a few hours afterwards neither Dr. Poulton nor

myself could find any physical signs in this region. Impaired resonance now appeared in the left axilla as high as the eighth rib, but this dulness was most peculiar, as it would be absolutely dull in the morning and hyperresonant in the afternoon. On May 13th it was decided to explore here under an anæsthetic, and Dr. G. Hayward having administered gas and ether, a hollow needle was inserted in the eighth interspace in the mid-axillary line, and about 3ii. of foul-smelling pus withdrawn. An inch of the ninth rib was then resected, and a small flat cavity entered, which contained foul pus. The cavity could be extended inwards by gently insinuating the finger, and appeared to be going below the arch of the diaphragm and above the stomach and spleen. A tube was inserted and a dry dressing applied. The nurse was told to look out for the contents of the stomach on the dressing, and they appeared at the first changing.

On the following morning, on removing the dressing and giving the patient milk to drink, it immediately came out through the drainage tube, shewing a perforation of the stomach into a subphrenic abscess. The patient gradually improved, but the stomach contents still escaped from the wound, but in varying quantities, and on May 24th it was noted that if the patient remained on her back or on the left side the fluid contents of the stomach escaped, but if the patient lay on the right side she soon suffered a peculiar dull pain, only relieved by turning on her back and allowing the drain to act. On June 4th it was observed that the patient was becoming decidedly emaciated, with a high evening temperature, and her friends took her home to the country, where she lingered for a few weeks and died practically of starvation. Unfortunately no *post-mortem* examination could be obtained.

The second case was Mrs. A., æt. 64, seen at Burnside with Dr. Borthwick on September 4th, 1901. The patient was a very anæmic and somewhat emaciated woman, complaining of a discharging sinus at the umbilicus. Her past history was good; seven years before she had been operated upon by the late Dr. Way for varicose veins. Her present illness dated back two years, when she first noticed an uncomfortable sensation in the upper abdomen, which was soon followed by increasing weakness. There had never been any vomiting of blood or coffee grounds, and only a few attacks of retching. A swelling in the abdomen in the neighbourhood of the umbilicus was first noted about a year ago, but only became painful during the last few weeks. She was seen by Dr.

Borthwick, nine weeks ago, and has been in bed ever since; but she does not think that she has lost much flesh. The swelling became much larger after Dr. Borthwick saw it, and he recommended exploration, but the proposal was refused. Six weeks ago she had rigors followed by night sweats, and fourteen days ago a foul smelling discharge of pus occurred from the umbilicus. Her present state showed a pale face, but fairly well nourished body. There was a swelling about the size of a foetal head at term, placed above the umbilicus, tender in the upper portion, with a fullness to be traced below the umbilicus on the left side. The swelling was movable laterally under an anæsthetic. The umbilicus presented a central perforation, which admitted a probe for one inch, and discharged a thin, foul-smelling pus. Nothing else abnormal could be detected in the abdomen, and the lungs were healthy. The heart's apex beat could not be felt, the sounds were clear at the apex and base, but a systolic murmur could be heard over the xipho-sternal articulation. The urine was of a good colour, acid, 1020, with no albumen, sugar or bile. The axillary temperature was 99.6° F. The pulse 116, soft and compressible. She was admitted to the private hospital on the evening of September 4th, and anæsthetized on the morning of the 5th by Dr. Cudmore, Dr. Poulton assisting me, and Dr. Borthwick being present. The umbilical fistula was enlarged and the finger entered a stinking, soft pultaceous mass. This could be fairly well outlined by the finger in the mass and the hand outside. Gas of a foul-smelling odour escaped on opening the umbilicus; the cavity was washed out and two drainage tubes inserted. The soft pultaceous material that came away was more like broken-down brain substance than anything else, and it was noted that it showed very little tendency to bleed. On September 6th it was observed that there had been a fair discharge of foul-smelling pus; the temperature was normal and the patient had passed a fairly good night and seemed better. On September 7th a glass drainage tube was inserted in place of an indiarubber one, and through it the contents of the stomach, such as milk and porridge, escaped, along with foul-smelling pus. On September 8th a large quantity of highly acid fluid escaped through the tube, bile-stained and smelling like vomit. In this fluid were pieces of partially-digested egg and bread. The glass tube was removed and a short indiarubber one inserted. The patient appeared much better in herself.

The contents of the stomach continued to escape for several days, together with pus, but

the opening gradually closed, and would remain so for a few days and then burst out afresh. The swelling remained much the same in size, and the patient went home at the end of a month and eventually died; Dr. Borthwick telling me that the swelling increased in size before her death. No *post-mortem* was obtained.

The third case is not altogether a certain diagnosis, and it only struck me what was its nature whilst writing this paper. I will give it for what it is worth.

Miss O., *æt.* 18, sent to me by Dr. Davies, of Yorketown, on September 27th, 1901, complaining of a bad cough, more especially at nights when lying down, the cough having been present about two months. During this time the patient had been losing flesh, but had never coughed up any blood or hydatids, and had not suffered from night sweats. She was a very anæmic girl, but fairly well nourished. Her breathing was short, and on examination there was found to be dulness on the right side, from the hepatic region up to the right nipple, and extending round to the angle of the scapula behind. There were a few crepitations in front, with tubular breathing below and to the left of the right nipple. The breathing in the axilla and posteriorly was almost inaudible, and the vocal resonance and fremitus absent in these situations. The heart's apex beat could not be localised. Her heart's sounds were normal, and her urine was free from albumen and sugar.

She was admitted to the private hospital, and on the night of her admission her temperature was 103° F. Next morning she had coughed up about half a pint of what looked like frothy expectoration on the surface, with a creamy material below. Dr. J. C. Verco saw the patient with me in the afternoon, and we both thought that the physical signs pointed to a hydatid cyst on the convex surface of the right lobe of the liver, and we decided to explore with an aspirating needle, and drew off about 6 ozs. of ordinary serous fluid from the posterior axillary line, but this made no difference to the physical signs in front. I had the expectoration examined, and the report said no signs of hydatid, no tubercle bacilli; but there were plenty of yeast cells and starch granules and debris. After aspiration the temperature kept down, but the physical signs remained the same, and the patient returned home. She came to see me again on December 10th, and the physical signs were still the same with the exception of an enlarged gland in the right supraclavicular fossa, which made me suspect a new growth in the lungs. I had the expectoration again examined, and the report came back again

—no tubercle bacilli, no signs of echinococcus, but starch granules, yeast cells, and what appeared to be partially-digested food. I must say that I was at a loss for a diagnosis, and the girl returned home, and Dr. Davies told me a few weeks later that he was certain that it must be pulmonary tuberculosis, but since reading Robson and Moynihan I have come to the conclusion that it is a case of gastric fistulæ opening into the right lung.

In the first case, there can be very little doubt but that the patient had a gastric ulcer, which ruptured during the night of April 26th, 1899, during a violent attack of vomiting; and instead of the patient dying in a short time, adhesions formed, and a subphrenic abscess followed. It is almost impossible to say whether the perforation in this case occurred on the anterior or posterior surface of the stomach; but I am inclined to think it was on the former, not only from the acute collapse and abdominal pain which occurred, but from the condition found at the operation. Probably what happened is this: a perforation took place on the night of April 26th, but not enough to flood the peritoneal cavity; adhesions formed between the great omentum and the anterior abdominal wall and liver; the contents then made their way up on the left side of the falciform ligament of the liver, and formed the peculiar cavity my finger went into. This cavity at times must have been full of gas and at others full of fluid from the varying dulness and hyperresonance. So much was this the case that I thought Dr. Poulton would think I had turned my physical signs topsy-turvy, for whenever I had found the side dull in the morning he found it hyper-resonant in the afternoon. I presume when we turned the patient on the right side the escaped contents of the stomach began to digest her internal organs, whatever may have formed the right wall of the cavity giving rise to the dull pain. This was always relieved by allowing the contents to escape on turning the patient on to her back or left side. The attack of parotitis coming on in the case is of interest, especially when considered in connection with Stephen Paget's paper on this condition following abdominal injuries, and bears out what he says about the inflammation of the parotid occurring in other abdominal injuries than those connected with the pelvic viscera.

The second case is an example of idiopathic gastric fistulæ. This condition is extremely rare. Murchison could only find 25 such cases extending over three centuries. From the age of the patient one would expect the ulcer to

have been malignant in origin, but of this I am uncertain. There was the history of the two years' illness, with the slowly growing swelling and the pultaceous mass, which was so markedly non-vascular, and did not appear to be malignant. The idea I formed at the time, and which I still believe to be the correct one, was that a rupture of a gastric ulcer took place slowly on the posterior wall of the stomach into the lesser omental cavity, and that this cavity became filled with a kind of lymph, which gradually suppurated, became adherent to the neighbourhood of the umbilicus and perforated here. What struck both Dr Poulton and myself was the amount of lateral movement that could be obtained, and also the localised swelling which could be so plainly mapped out by the finger in the swelling and the hand outside. Of course the condition may have originated in a malignant ulcer, and yet the material our fingers went into might have been lymph, lowly organised and breaking down.

With regard to the third case, I would rather say no more here, as probably future developments may make matters clearer; but my present idea is that it is a case of duodenal ulcer, which has formed a retroperitoneal abscess, and this has passed upwards, through or behind the diaphragm, and after entering the right pleura has burst into the right lung.

[Read before the South Australian Branch, British Medical Association, March, 1902.]

ADIPOSIS DOLOROSA (DERCUM'S DISEASE).

By E. Angas Johnson, M.D., M.R.C.S., Assistant Physician to the Adelaide Hospital.

Mrs. H., *æt.* 32, nullipara, who was born in and has never been out of this colony, consulted me in November, 1901, for her "stoutness," which she said was attended with great pain, especially at menstruation. The menses are regular, but scanty, and last only two to three days.

Previous History.—Always strong and well. Influenza two winters ago. No history of syphilis, alcohol, rheumatism, or traumatism. Thirteen years ago was married, and at that time she weighed 7 st. 9 lb. Eight years ago she noticed that her stomach was getting larger, and very tender on pressure (the pain being compared to that of a bruise). Then the hips, chest, arms, and legs got bigger. Pains of a neuralgic nature under the left shoulder, which have been worse since the influenza; also neuralgic pains on crown of head, across the

forehead, and particularly over the left temporal region. There are frequent hot flushes of the face, followed by cold, clammy sensations; also giddy sensations, with a feeling as if she is going to fall forwards. Locomotion is difficult, and a very short walk is followed by great breathlessness and palpitation, her nervous equilibrium being upset over most trivial matters. When she "catches a cold," the pain in the chest is so severe that she cannot sleep on its account. Standing for any length of time causes severe pain in the ankles and knees (which don't swell); this also prevents sleep.

Since both her sister and self were employed by my parents before they were married, I have been able to notice the excessive development of adipose tissue more carefully than had I not known her so long. At that time she was a very thin girl, and her sister was almost twice as stout; so that by contrasting the present measurements of their two bodies the increase will be self-evident.

	Mrs. H.		Her sister, Mrs. M., multipara.	
	Right.	Left.	Right.	Left.
Arm	12½"	12½"	10"	10"
Forearm	9½"	9½"	8"	7½"
Chest (over breasts) ...	41"	—	32"	—
Waist	34"	—	20"	—
Buttocks	60"	—	41"	—
Thighs	23"	—	19½"	—
Legs	16"	—	13½"	—
Across shoulders ...	15"	—	15"	—
Across buttocks ...	20½"	—	16"	—

All the above measurements (except the last two) were taken around the middle of the parts affected.

On Examination.—A very stout woman, with a slow, waddling gait (which Professor Watson very aptly terms an ambulatory lipoma). The hair is normal, the face is not affected, and looks small comparatively. The eyes are normal, the sight unaffected. The thyroid gland is normal so far as it can be felt. *The Chest:* The walls are infiltrated; the mammae are very large, soft and doughy; the lungs normal; the heart, the sounds are weakly heard, but no murmur detected. The temperature is normal, the pulse 96. *The Abdomen:* The abdominal walls are very much infiltrated, so that whilst in the recumbent position big folds of fat are produced. This is tender on manipulation or slight squeezing, the pain, as already noted, is likened to that which follows a bruise, the skin bruising on very slightly squeezing it. *Urine:* The quantity not increased; specific gravity, 1010; no albumen, no sugar, no deposit. *Per*

Vaginal: Professor Watson said the vagina was small, and the uterus infantile. *The*

Extremities: The hands and feet are normal, except for a slight fulness of the thenar, hypothenar, and plantar eminences. The reflexes are normal. There are no enlarged veins or abnormal tenderness over the big nerve trunks. No muscular wasting can be detected. The headache, vertigo, palpitation, and sleeplessness are intensified at menstruation.

15th February, 1902.—The weight is 13 st. 7 lb.

Treatment.—Slight massage, combined with thyroid tabloids, which will both be gradually increased.

5th March, 1902.—Patient has not been weighed since, but the affected areas already seem firmer to the touch (and not so doughy).

Although morphia is condemned, it was the only drug that relieved the severe neuralgic pains which preceded her last menstrual attack one week ago. Professor Watson very kindly saw this patient in consultation with me, and confirmed the diagnosis.

Unfortunately, the patient won't allow a photograph to be taken of her, but from a picture in the *Medical Review*, Vol. III., page 676, a fair idea of her appearance can be got, Mrs. H. being about twice as fat, the hips being very prominent.

CLINICAL AND PATHOLOGICAL NOTES.

An Obscure Case.

A MALE child, aged 7 years, was admitted to Prince Alfred Hospital, Sydney, on July 3rd, 1901, with a history of six days' illness with vomiting and abdominal pain, attributed by his parents to his having eaten some meat. He had always been delicate, suffering from "weak digestion," and was said to have had "erysipelas of the head and inflammation of the brain" two years previously. On admission he was in an extremely collapsed condition, extremities cold, semi-conscious, pulse barely perceptible, respiratory sighing, and temperature sub-normal; tongue dry and furred, abdomen retracted and hard, and marked tenderness over the epigastrium and left hypochondrium was present. The bowels were constipated. There was no squint or indication of cranial nerve involvement. The vomiting was urgent, and nutrient enemata were not retained. The temperature only reached 101° on one occasion. The stomach was washed out with saline solu-

tion, and then with Condy's fluid, and subcutaneous injection of one pint of saline solution was administered. Hypodermic injection of strychnine $\frac{1}{10}$ grain every three hours; hypodermic of morphia $\frac{1}{8}$ of a grain on one night, and later a mixture of bismuth sub-carbonate and soda bicarbonate completed the treatment adopted, and which resulted in rapid convalescence and cure.

The child was re-admitted on October 23rd, 1901, in practically the same state as when admitted on July 3rd; this illness also ensuing upon his having some meat for the first time since his first attack. The symptoms were practically the same, but though similar treatment was adopted, he never rallied, and died 30 hours after admission.

A *post mortem* examination was made by Dr. Cleland a few hours after death. The stomach and intestines presented no macroscopic signs of any disease. The liver was slightly softer than normal, and showed some fatty change on microscopic examination. The kidneys were pale, but otherwise showed no gross change in structures; but the epithelium of the tubules showed considerable fatty degeneration. All other organs of the body, including the nervous system, appeared perfectly normal.

Cultures were taken from the spleen, which grew on agar in twenty-four hours as dense, white spherical colonies, consisting of a bacillus staining somewhat irregularly and faintly with methylene blue, and sometimes slightly curved. From the liver two colonies only, of a similar but stouter bacillus, were obtained.

The points of interest in the case are:—

1. The very severe gastric symptoms, without corresponding *post mortem* appearances of inflammation of the gastric mucosa.
2. The total absence of *post mortem* appearances of gross pathological changes.
3. The readiness with which the symptoms cleared up in the first attack under lavage of the stomach and saline injection, as opposed to the utter failure of the same treatment on the second occasion.
4. The trivial nature of the supposed cause, and absence of any other known aetiological factors.
5. The fact that the attacks might have passed for cerebral disturbances, while the large size of the head and the doubtful history of inflammation of the brain would have supported the theory, whereas the *post mortem* examination revealed a very large, but, macroscopically at any rate, a perfectly healthy brain.

C. BICKERTON BLACKBURN, M.B., CH.M.,

Medical Superintendent
Prince Alfred Hospital, Sydney.

MIRROR OF HOSPITAL PRACTICE IN AUSTRALASIA.

PRINCE ALFRED HOSPITAL, SYDNEY.

CASE OF CIRRHOSIS OF THE LIVER IN A CHILD.

(Under the Care of Dr. SCOT-SKIRVING.)

Reported by A. H. MACINTOSH, M.B., CH.M.,
House Physician; and J. B. CLELAND,
M.B., CH.M., Resident Pathologist.

E.S., female, *æt.* 12 years, was admitted to Prince Alfred Hospital, Sydney, November 23rd, 1901, complaining of swelling of abdomen. She had noticed the abdomen gradually becoming more and more prominent for the last nine months, but the swelling had increased much more rapidly lately. She had never had any abdominal pain and only very occasional irregular vomiting. Bowels were constipated and the appetite poor. She had been getting gradually weaker. She had no cough, nor any swelling of feet or legs.

Past History.—She never had scarlet fever, and never had alcohol given her in any form. She never suffered from an illness which might have required alcohol, and was not accustomed to take spices or condiments.

Family History.—Good, no phthisis. Brother said to have an enlarged liver. Parents testotallers and very plain-living people.

Present State.—Patient is anemic; no sign of icterus. Face full and puffy.

Digestive System.—Appetite poor. Tongue highly furred. Bowels constipated—no pain on defecation. Abdomen uniformly distended, tense, umbilicus everted. Superficial veins very prominent. Well-marked fluid thrill. Extensive dullness in flanks and lower part of abdomen, varying with position of patient; not to be felt on palpation.

Liver Dullness.—From fifth rib in nipple line and sixth rib in axilla.

Heart.—Apex beat in fourth space in nipple line. Sounds clear.

Lungs.—Impaired percussion note at bases. Crepitant notes at both bases, but clear elsewhere.

Urine is acid, one-eighth albumin, and contains granular casts. Some oedema of feet and legs.

Subsequent Examination of the Urine.—The amount always scanty, never more than 25 ounces in 24 hours—usually less. Specific gravity varied between 1015 and 1030; only twice contained albumin, then only a trace.

November 27th, 1901.—The abdomen was

tapped. Ten pints of clear fluid withdrawn (specific gravity 1004, acid, heavy cloud albumin, no T.B.). Spleen could now be felt $1\frac{1}{2}$ in. below costal margin. Liver margin smooth, regular, firm and sharp at level of costal margin.

December 10th, 1901.—Paracentesis abdominis again performed. Fifteen pints of fluid drawn off.

December 15th, 1901.—Eleven pints withdrawn.

January 2nd 1902.—Laparotomy performed. Five pints of fluid let out. Peritoneum healthy. Nothing to be made out. Drainage tube left in. Patient became very restless; later became delirious, and on January 6th, 1902, sank into a state of coma and died.

Before death she emitted several times a short sharp cry like that of meningitis, the respirations became very slow (about ten a minute), and the pulse remarkably quick. The temperature lay between 98.4° and 100° .

Post-mortem Examination, Jan. 7th, 1902.—

The bodily nutrition was good, but the subcutaneous fat deficient; rigor mortis was passing off. The *lungs* were congested at their bases; here and there were some small purple blood extravasations. The *heart* weighed 8 oz.; its valves and coronary vessels were healthy; some petechiæ and vibices appeared under the visceral pericardium, and a few smaller ones in the parietal pericardium; the blood in the vessels was fluid. The *liver* weighed 30 oz.; it was uniformly contracted with some small bossy projections in places; the surface was of a pale whitish colour; the consistence exceedingly tough; on section, thick bands of pale pinkish or white fibrous tissue invaded the whole organ isolating numerous small yellow lobules or groups of lobules which projected markedly above it; in some places this fibrous tissue was alone left; the capsule of the liver was not appreciably thickened. Microscopically, the liver presented the typical appearance of a multilobular cirrhosis; the portal systems were surrounded by a very great increase in the connective tissues, this being in general fibrous, though in places more cellular; the larger branches of the portal veins traversing these areas were held widely dilated by the dense fibrous nature of their walls, which prevented any contraction; the contour of numerous bile ducts could also be seen in this stroma, occupying positions formerly taken by hepatic cells; rounded isolated hepatic lobules could be seen in various stages of diminution, almost to obliteration, though their remaining cells exhibited no great fatty changes. The *gall bladder* was contracted, small, and thickened. The *spleen* was large, firm, and weighed 11 oz.; it

was dark red in colour, and showed prominent Malpighian bodies; under the microscope, there was no decided increase in its stroma, but the rounded cells of the lymphoid tissues were noticeably prominent. The *pancreas* was very firm; microscopically appeared an increase in its interacinous stroma consisting chiefly of rounded and spindle cells which tended here and there to enter between the peripheral cells of the acini so as to separate and isolate them; in the centres of some acini, collections of small rounded or irregular or spindle-shaped cells could be seen. The *kidneys* were deeply congested; the capsules peeled; the left weighed 5 oz., the right 6 oz.; there was a scattered infiltration of small rounded cells in the stroma between the tubes, and in the Malpighian capsules, but this was not very marked; the renal cells were granular and their nuclei indistinct. The *suprarenals* were unaffected; the *stomach* showed some slight old slaty pigmentation; the *intestines* were healthy; the *peritoneum* was not thickened; it was discoloured and of a greenish hue (p. m. changes) close to the suprapubic wound. The *brain* exhibited no changes. The *urine* removed p. m. contained a few blood cells, an occasional blood or hyaline cast, and many bladder cells, but no crystals.

The following attempts at establishing the collateral circulation were noticeable. The vein accompanying the phrenic nerve was enlarged, the veins in the falciform ligament of the liver were marked, as were all the retroperitoneal veins which connected with small veins running into the mesentery; a deep purple varicose condition of veins connected the mesentery, binding down the cœcum and adjacent parts with the deep pelvic veins and those around the iliac bone.

Remarks.—The following points may be dwelt upon. The youth of the patient; the entire absence of alcoholic history either personal or parental; the rapid re-accumulation of fluid after tapping; and the fact that though this had to be repeated several times chronic peritonitis was quite absent; the presence of pancreatic as well as hepatic cirrhosis; the sudden supervention of auto-intoxication symptoms (from defective hepatic action) shortly after exploratory laparotomy and draining, which supervention may be merely a coincidence or directly due either to the loss of fluid by draining with increased absorption in consequence from the alimentary canal, thus increasing the work of the liver cells, or to the reparative changes and increased metabolism originating in the area of the wound; and the history of liver enlargement in the patient's—ther.

REVIEWS AND NOTICES OF BOOKS.

MENSTRUATION AND ITS DISORDERS. By Arthur E. Giles, M.D., B.Sc., F.R.C.S., etc.; Surgeon to the Out-patients, Chelsea Hospital for Women; Gynæcologist to the Tottenham Hospital, etc. Crown 8vo., 2s. 6d. net. London: Baillière, Tindall and Cox. Sydney: L. Bruck.

The writer of this monograph aims at presenting a concise and practical exposition of normal and diseased menstruation. Within the space of 100 pages, he has successfully carried out his object. Too frequently *brochures* of this kind are a weak and unsatisfying dilution of the standard treatises. In the present case this cannot be charged, and Dr. Giles has done his work so well that the larger treatise which he promises on the same subject will be expected with interest.

About one-third of the volume is given to a consideration of the physiology of menstruation. Its anatomical and physiological characteristics, and its relation to the "œstrus" in animals in the light of Heape's investigations are discussed; next we have an account of its clinical characters, and chapters on its relation to conception, ovulation, and pregnancy, and on the menopause.

The disorders of menstruation receive fuller attention, and they are treated simply and clearly, in a manner that will make this little book practically useful to the practitioner. Dr. Giles emphasises the fact that these disorders are but symptoms, suggesting a cause to be investigated, "and not separate diseases, for the cure of which an empiric therapeutic formula suffices."

To the practitioner of medicine the subject is one of every day interest, and this little book can be recommended for perusal as being, though its scope is circumscribed, both scientific and practical.

A.W.M.

OBSTETRIC AND GYNECOLOGIC NURSING. By E. P. Davis, A.M., M.D., Professor of Obstetrics in Jefferson Medical College and Philadelphia Polyclinic. Illustrated. Philadelphia and London: W. B. Saunders and Co., 1501. Melbourne: Jas. Little. Price, 9s.

This book, which was prepared for the Training Schools of the Jefferson and Philadelphia Hospitals, in both of which the author teaches, is designed to furnish instruction as to the various duties of the obstetric and gynecologic nurse. Obstetric nursing demands some knowledge of natural pregnancy, and of the signs of accidents and diseases which may occur during pregnancy. It also requires knowledge and experience in the care of the patients during the labour, and her complete recovery, with the needs of the child. Gynecologic nursing requires special instruction and nursing, and a thorough knowledge and drill in asepsis and antisepsis are absolutely indispensable. This book will be found to supply in a clear and concise manner all the details necessary to enable any fairly educated woman to become proficient in these branches of nursing, provided that she receive at the same time proper practical training. Fortunately the days of "Sairey Gamp" are nearly past, and women are beginning to fully recognise the necessity of having properly trained nurses to attend to them in their accouchments. The work is very freely illustrated, and can be safely recommended as a text-book for the two branches of nursing that it deals with.

W.H.C.

A TEXT-BOOK OF THE PRACTICE OF MEDICINE.

By Dr. Hermann Eichhorst, Professor of Special Pathology and Therapeutics, and Director of the Medical Clinic in the University of Zurich. Authorised translation from the German. Edited by Augustus A. Eshner, M.D., Professor of Clinical Medicine in the Philadelphia Policlinic, &c. Philadelphia and London: W. B. Saunders and Co. Melbourne: Jas. Little. 2 vols. Price, £1 10s.

This is a translation from the German of Professor Eichhorst's "Practice of Medicine," which, the author says in the preface, was written at special request as an elementary text-book for students.

Not much criticism need be directed to the book itself, though one cannot help being struck with its inequality. One of its best features is an excellent account of the different modes of investigation of the functions of the stomach. The author gives a full account of the processes for ascertaining the absorptive power, the motor activity, and the digestive power of the stomach. This is given much more fully than in any English text-book of the same class, and is undoubtedly of real practical value. On the other hand, the account given of "Appendicitis" is confused and unsatisfactory. The author really believes in an occasional primary typhlitis, as apart from an appendicitis. Although he is not alone in his belief, it is contrary to all recent pathological experience, which is derived chiefly from the examination of specimens obtained from the operating theatre, and not the *post-mortem* room. The treatment recommended is antiquated, to say the least; e.g. (we quote the exact words): "An ice-bag that is not too heavy should be applied over the right iliac fossa. When the acute inflammatory manifestations have subsided, and the exudate has been well circumscribed, the ice-bag should be replaced by a *hot cataplasm*, which will better favour the *absorption of pus*. Severe pain will frequently be relieved speedily by the application of from 6 to 10 leeches. Treatment with opium should be persisted in till all pain in the right iliac fossa has disappeared, even if many weeks should be required." One can hardly believe that such treatment should be recommended in a modern text-book. Perhaps no more dangerous advice could be given to a student. In the same way the author does not recommend the antitoxine treatment of diphtheria with absolute confidence; he recommends that 1,000 units be injected immediately, and 1,000 more next day, in a severe case. He does not seem aware of the great value, and even necessity, of giving much larger doses.

Evidently the book cannot be recommended as a text-book for students.

With regard to the translation, it is fairly well done; the English is always clear, and German idioms are, as a rule, absent. The illustrations are not numerous, and are poorly executed; the majority are of very little help to the text. J.M.G.

THE AMERICAN ILLUSTRATED MEDICAL DICTIONARY.

By W. A. N. Dorland, A.M., M.D. Second edition, revised, large octavo, nearly 800 pages, bound in flexible leather. Price, 22s. 6d. Philadelphia and London: W. B. Saunders and Co., 1901; Melbourne: J. Little.

This is a complete dictionary of the terms employed in medicine, surgery, dentistry, pharmacy, chemistry, and all the kindred branches; containing also much collateral information of an encyclopedic character; also new and elaborate tables of arteries, muscles, nerves, veins, etc.; of bacilli, bacteria, micrococci,

streptococci, eponymic; tables of diseases, operations, signs and symptoms, stains, tests, methods of treatment, etc.

The author has sought a middle course between the large, unwieldy lexicon and the abridged student's dictionary, avoiding the disadvantages of both. Special attention has been paid to the wording of definitions, with the intention of making them clear, concise, and yet sufficiently complete. The important features of pronunciation and derivations have received careful attention. The illustrations have been chosen for their value in aiding the text rather than for their artistic value. The work has been admirably designed and carried out, and the type is so arranged and varied that the eye is not confused and wearied in scanning a page in search of the required information.

The Dictionary is a valuable addition to a library, and it is certain to be popular with the profession.

SEXUAL INVERSION. By Havelock Ellis, L.S.A. England. Sold only to physicians, lawyers, advanced teachers, and scientists. Philadelphia, Pa.: F. A. Davis Co.

This work deals with a subject which may be of some interest to alienists and of some assistance to medical jurists, and that is about all that can be said of it. A record of a number of cases of sexual inversion in the two sexes, with a description of their experiences in various abnormal ways of gratifying the sexual appetite is not edifying reading to any pure-minded person, whether he be a physician or lawyer, or scientist. To speak of such a work as "scientific" is, in our opinion, to use a misnomer.

A BRIEF MANUAL OF PRESCRIPTION WRITING IN LATIN OR ENGLISH FOR THE USE OF PHYSICIANS, PHARMACISTS, AND MEDICAL AND PHARMACEUTICAL STUDENTS. By M. L. Neff, A.M., M.D., Cedar Rapids, Ia. Philadelphia, Pa.: F. A. Davis Co.

The first part of this small work is devoted to a brief account of Latin grammar, sufficient to enable one unfamiliar with the language to write an intelligible and correct Latin prescription. As every medical student is, or ought to be, familiar with the rudiments of Latin, we fail to see the use of this part of the book.

The remaining portions of the work, which are devoted to a description of the method of prescription writing, with illustrations of model prescriptions, tables of doses and incompatibles, are useful, and should tend to keep up the art of prescription writing, which, with the great increase in these days of tableoids and "elegant preparations," we fear is fast decaying.

DEATH FROM TETANUS.—The death of Mrs. Emily Pearson, who died recently in the Melbourne Hospital from the effects of an injury to her hand, was inquired into at the Morgue by Dr. Cole, Acting City Coroner. The evidence of deceased's husband was that on the 13th ultimo his wife, while climbing over a neighbouring fence after a tablecloth, slipped and hung suspended on a nail which had entered her hand. The flesh eventually gave way and released her, and as she fell a piece of paling entered the wound. She went to Dr. Reid, who dressed the wound, and attended deceased every day. On the 20th, deceased complained of pains and a peculiar feeling around her jaw. Deceased was sent to the Melbourne Hospital, where her case was diagnosed as a severe form of tetanus. Dr. Bonnin evidenced that deceased died from that disease. A verdict of death from tetanus was returned.

THE AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, 21ST APRIL, 1902.

THE POLICY OF THE NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

In the excellent address delivered at the Annual Meeting of the New South Wales Branch of the British Medical Association, by the retiring President, Dr. FOREMAN, we had laid down in clear and emphatic language the past policy of the Branch, and some good advice as to our future action. We hope that his sanguine expectation will be realised, and that by the end of the year we shall have enrolled in our membership all the members of the profession in the State who are eligible for membership.

We are passing through troublous times, and we need to emphasize again the importance of unanimity of action in preventing encroachments upon our rights as professional men and citizens. Our policy is a *defensive* one, and not *offensive*; we seek to act not in the interest of any one section or clique, but in the interests of the profession throughout Australasia.

Dr. FOREMAN has put very clearly the case we have against the Australian Natives' Association, and no policy of compromise or mediation can be tolerated. We have no war to wage against the legitimate friendly societies; we have always recognised the immense influence for good they exert upon the industrial population, and the great assistance they are to a large section of the profession, and any action which would tend to destroy the usefulness of these societies, or to "smash them up" (to use the language which has been put into our mouths by the officials of the Australian Natives' Association), would be strenuously opposed by the Council of this

Branch. But we shall certainly wage war upon a society which is political in aim, but tries to carefully disguise this fact under the masquerade of a medical benefit society. In so doing we do no injury to a single individual who is deserving of the help and consideration of medical men. We are acting also in the best interests of the legitimate friendly societies, whose field for recruiting new members is being damaged by the invasion of the Australian Natives' Association, which appears to threaten, judging by the figures put forth by the officials of that organisation, to destroy their progress and efficiency.

We are glad to know that some of the officers of these Orders in Sydney and other centres are alive to this fact, and regard the Australian Natives' Association with no friendly eye, in spite of the efforts of the officials to impress upon them and the public that the sole aim and object of the British Medical Association is to deal a death blow to all friendly societies. The President of the United Friendly Societies' Association was recently reported to have said that "they had had no trouble with their doctors until the advent of the Australian Natives' Association"; so that to be consistent he must regard this association as a thorn in their sides rather than the bosom friend that the officials would have them believe them to be. We know, further, that if the Council of the New South Wales Branch of the British Medical Association had only taken the bait held out to them by the Australian Natives' Association, the friendly societies would have found themselves actively opposed by the Australian Natives' Association. Now, having failed to secure the benefits they want from us, the Australian Natives' Association seeks an alliance with the friendly societies of an *offensive* nature against us. But we are mistaken if the latter will not see that such an alliance is not in their own interests, and that

they will act wisely in not taking up the cudgels for a rival association, and precipitating an unnecessary quarrel with the profession.

THE DISCUSSION ON CANCER.

THE discussion on cancer at the recent Inter-colonial Congress at Hobart seems, on the whole, to have been disappointing. With all due deference to Professor ALLEN, we think that nothing has been gained by it, and no new facts bearing on the etiology, pathology or treatment of the disease have been forthcoming. We regret that the suggestion made in the editorial in our January issue was not acted upon, and a Collective Investigation Committee appointed to collect evidence and report to a subsequent Congress.

Professor ALLEN's introductory address, of which we give an abstract in another column, was the result of an immense amount of labour in collating statistics, and dealt with the subject from various points of view; but we must confess our inability to accept his conclusions *in toto*. His inference that the increase in cancer was largely only an apparent one because of the relative increase in the potential cancer patients, is not borne out by Mr. COGHLAN's statistics for this State, and cannot be taken to explain the relatively larger increase in cancer in England in recent years. While, of course, the parasitic theory so far lacks actual demonstrative proof, we think that the tendency of recent investigations, as well as a study of the clinical history and course of cancer patients all point strongly in favour of this theory. On no other hypothesis can all the facts be harmonised, and here we would remark that in speaking of "Cancer," we should restrict our attention to "carcinoma" as distinct from "sarcoma." The two forms of malignant tumour are distinct in their mode of development, their age incidence, and mode of secondary dissemination, and no one etiological

factor can reasonably be assigned to the two forms of disease. No theory of perversion of nutrition of the tissue or loss of federal control will, surely, explain the cancerous cachexia, which so strongly suggests a poisoning of the tissues by the products of the growth of some parasite, or the introduction into the system of some foreign substance; and further, we think that on no other hypothesis can the occasional spontaneous disappearance of the disease be explained. But we must await the results of further experimental and clinical investigation, and hope that much good will ensue from the large amount of attention and research now being given to this subject by the pathologists of Europe and America.

Many points of interest in Professor ALLEN's address were not touched upon by subsequent speakers, and the discussion practically resolved itself into a series of papers on various aspects of the question. Dr. VERC0's statistics of the disease in South Australia are very interesting, and the fact brought out by him—that women in South Australia are relatively less frequently attacked by the disease—is difficult of explanation.

THE MONTH.

The Victorian Sanatorium for Consumptives.

THE Victorian Sanatorium for Consumptives has now been in existence for eleven years, and it is a matter for regret that this institution, which appears to be doing such excellent work, and which is always full to overflowing with patients, should lack widespread support from the community. The patients spend the summer in the sanatorium at Mount Macedon, and the winter at Echuca. During the last summer season at Mount Macedon, the average weight gained by each patient was a stone. Accommodation is provided for fifty patients, and over fifty more who have been medically certified as suitable cases are awaiting admission. During the year, owing to great increase in the demand for admission, temporary additions in the shape of tents were used to accommodate twenty-two more patients; but the committee having recently received a donation of £2,300 from a

benevolent lady in another State, intend to erect permanent additions to the buildings. The State Government contributes £200 per annum towards the maintenance of the institution, and about £1,300 is received from other sources, but the year closed with an overdraft of about £428. No statistics are included in the report showing the number of patients who have been treated, nor the results obtained by the treatment, but numerous letters, received from persons who had been patients at the sanatorium, expressing the great benefits they had received from the treatment there, are appended. We hope the next year will be more successful financially, and that the active support and sympathy of the medical profession, which the committee consider they have a right to expect, will be accorded to them.

Old Age Pensions and Alcoholism.

We are informed on good authority that since the introduction of the Old Age Pension Scheme in New South Wales, the number of deaths occurring among the pensioners from alcoholism is very considerable. It is true that there is a law against the sale of drink to these pensioners, but as in the case of Sunday liquor selling, it is probably more honoured in the breach than in the observance. If this statement be true, then a large share of the money paid by the State for old age pensions goes directly into the pockets of the publicans, and in so far as it does this, the scheme is a failure. This is a matter for serious consideration by the Parliament of this State, and some amendment of the Act must be introduced to render it more effective for the purpose for which the scheme was initiated, and prevent a large part of the Fund going to support the liquor trade of the State.

Reception House for the Insane, Melbourne.

The Lunacy Department is taking steps towards providing a receiving house for the temporary detention of persons suspected of insanity. At the meeting of the Metropolitan Board of Health, on April 1st, a letter was read from the Department asking if the Board would be willing to place seven acres of the Board's estate at Royal Park at the disposal of the Department as a site for such a structure. It was decided to reply, stating that the concession would be made, provided an equal area was added to the Board's present permanent occupation rights in the park.

New South Wales Medical Union.

At the annual meeting of the above, which was held on 26th ult., a discussion took place as to the advisability of reducing the annual subscription. The hon. treasurer (Dr. Crago) pointed out that the accumulated funds exceeded £2,000, and that the ordinary expenses of management were well within the amount received for interest. Various suggestions had been made as to the reduction of the subscription, or to so alter the constitution of the Union that more aggressive action could be taken in matters pertaining to the welfare of the profession. In order to ascertain the views of the members present the treasurer moved a resolution that after a member had paid ten annual subscriptions he should be exempt from further payments, except in the case of any unusual claim upon the funds. He pointed out that by this plan all the present members would pay the subscription for 1903-4, by which time there would be about £2,400 in hand, and a gradual reduction in the income would then take place, so that in about three or four years it would be reduced by one-half. Nearly every member present took part in the discussion, and it was pointed out that the Union had hitherto been fortunate in not having to pay the cost of any big action which might easily swallow up all its funds, and the unanimous decision arrived at was that it was premature to take any steps to diminish the subscription in any way. We fully agree with the decision, and hope that every medical man in the State will become a member of this organisation.

The Training of Nurses in Hobart.

In an article in the *Nursing Record and Hospital World*, of December 21, 1901, headed "Nursing in Tasmania," and signed "J. H. Milne, Lady Superintendent, Launceston Hospital, Tasmania," some disparaging statements were made concerning the training of nurses at the Hobart Hospital. It is there stated that in the Hobart Hospital there is no proper system of theoretical teaching, and no test examination of nurses. According to the Chairman of the Hobart Hospital, these statements are absolutely false, and calculated to materially injure the prospects of the nurses trained at this institution. This hospital was enrolled in July, 1900, as one recognised by the Council of the Australian Trained Nurses' Association, and in addition to the subjects mentioned in the curriculum adopted by the association, nurses trained in this institution receive practical, oral, and demonstrative

instruction in many other subjects. Miss Milne has been called to account by the Chief Secretary, and in reply has stated that the information she obtained was from a source she considered thoroughly reliable, and that she is prepared to make the necessary correction if the Hobart officials will furnish her with the facts bearing upon the subject. In the interests of the management of the Hobart Hospital, we hope Miss Milne will do so without any delay.

A Commendation.

It is not often that the self-sacrificing spirit of the medical profession is referred to in the public press. The following extract from an article in the *Broken Hill Barrier Miner* is worth noting: "Since prevention is better than cure, there certainly is good sense in paying men for keeping us healthy rather than for treating us when we are sick; but the more the doctor in private practice now succeeds in keeping us healthy, the less is his income. In those circumstances it speaks volumes for his public spirit, his humanity, and his jealous pride in the victories of science that the doctor, as a rule, toils unceasingly to improve the public health—to root out insanitary conditions; to familiarise the public with the rules of proper feeding and of hygiene generally; to evolve or discover means of grappling in a simple yet speedy and effective way with dread diseases. What has in this manner been done in what is known as 'preventive medicine' constitutes the most splendid of the achievements of the profession within the last generation; yet for the greater part it is not only work unpaid for, but in doing it the profession, in a great measure, 'cuts its own throat,' so to speak."

Friendly Societies and Hospitals.

At a recent meeting of the Trustees of the Wellington Hospital, New Zealand, a resolution was passed refusing to allow members of friendly societies to attend as out-patients of the hospital. This resolution has caused much dissatisfaction to those thus shut out, who contend that members of friendly societies are just as much entitled to share in whatever benefits are to be obtained from the hospitals as are ordinary citizens. There is reason to believe that the attitude of the Trustees is contrary to the view of the Government, and therefore, that Ministers will decline to approve the by-law in its present form. The Friendly Societies' Council, which is actively interesting itself in this matter, is in communication with the hospital Trustees on the subject.

THE FIGHT AGAINST TUBERCULOSIS IN AUSTRALASIA.

V.

New Zealand.

ALTHOUGH a young country like New Zealand can hardly suffer from the ravages of tuberculosis to the same extent as the more densely populated countries of the Old World, yet the gradual settlement of a large extent of territory must be brought about by pioneering with the necessary accompaniment of make-shifts, and these make-shift conditions obtain for a long time during the formation of township round the nucleus of the original handful of pioneer homesteads. No one will say that as a rule primitive townships are ideal from a sanitary point of view, and as the town grows the evils go unchecked for a considerable time, growing apace, and when at last is realised the need of sanitary reform and that "something must be done," the difficulty becomes great in bringing about changes in various directions of improved sanitation, vested interests having sprung up which in all lands have clogged the wheels of sanitary reform, so that in this respect young countries have their troubles in common with older ones.

New Zealand is happy in not suffering from the evils of centralisation. The whole colony is dotted with settlements, some large, some small, some very small (though no township can be too small which keeps the people from congesting the larger centres of population), and is blessed with a climate that apparently, as will be pointed out later on, is a great factor in shielding its people from their ever watchful enemy, tuberculosis.

During the last two decennial periods there has been on the whole, a steady decline in the death-rate from phthisis. In the decennial period 1881 to 1890 the figure for deaths from phthisis for the whole period per 10,000 living was 8.74. In 1890 it was 8.38 about half that of England and Wales and lowest of all the colonies (England reached its lowest record in 1896 with 13.07.) In the decennial period 1891 to 1900 the figure fluctuates between a maximum of 8.48 1894 and a minimum of 7.56 in 1900. During the same period the death-rate from all forms of tuberculosis per 10,000 living was also highest in 1894 with 11.57 and was lowest in 1896 with 9.62. In 1900 the figure was 9.85. During the last decennial period the figure for deaths from tuberculosis represented as a percentage of total deaths from all causes was highest in 1897 with 11.57,

and lowest in 1891 with 10.17, and in 1900 was 10.44. The hospital returns for 1900 showed 317 cases treated, with 90 deaths; the deaths from phthisis for the whole colony being 577, and from all forms of tuberculosis 752. Phthisis heads the list of all causes of death for the last decennial period, excepting the year 1894, when the deaths from "accident" (617) exceeded those from phthisis (576). The official New "Zealand Year Book" contains the following paragraph *re* phthisis:—"In all the Australian Colonies the rate is materially increased by the deaths of persons who have come out either already suffering from phthisis or predisposed thereto. There is no reason for believing that this circumstance has more effect on the death-rate in Australia than in New Zealand; so that the lower rate referred to in previous issues of this work as obtaining in this colony may be taken as proof of its superior climate for withstanding consumptive tendencies."

The medical profession is the chief agency at work in the education of the public, whereby they are induced to help in the fight against tuberculosis. The growing interest taken by the press in medical matters generally, and tuberculosis in particular, is also a powerful ally in the struggle. The Health Department in New Zealand have issued circulars and handbills and also large-type placards on tuberculosis, which later are posted up in all public places, post offices, railway stations, etc. The language is plain, and points out that tuberculosis is an infectious disease, exhorts people not to spit in public streets, explains the necessity of disinfecting rooms which have been occupied by phthisical persons, and also how consumptives should deal with their sputum, so that they may be able to minimise the risk of infection of others.

The Public Health Act of 1900 is a very up-to-date act, and provides, among other things, for the appointment of specially qualified Health Officers and Inspectors, and for administrative purposes the colony is divided up into six Health Districts, three for the North Island and three for the South, each one to have a District Health Officer. These Officers have been appointed, some permanently, others temporarily. The Health Districts are very large, and doubtless in time will be divided up for more efficient administration. The Health Officers are Government Officials, and not in the employ of the local authorities.

Section 26 of the Public Health Act provides for the notification of infectious disease or suspected infectious disease, and section 13

says: "The Governor may from time to time, by notice in the *Gazette*, declare any disease . . . to be an infectious disease, or any infectious disease to be a dangerous infectious disease." . . . Under this section the disease called or known as "tuberculosis" was declared infectious by notice in the *Gazette* of April 18th, 1901, and has to be notified accordingly. The occupier of the house on becoming aware of the presence of infectious disease has to notify the district officer, and the medical attendant has to notify the occupier and the District Health Officer. The notification of the occupier by the medical attendant, and of the Health Officer by the occupier, was certainly of educational if of no other value. Experience proved, however, that on account of the large size of the health districts necessitating a good deal of travelling about by the Health Officer, the notification of infectious disease did not ensure prompt action in dealing with it. To remedy this condition of things an Amendment Act was passed providing for additional notification to the local authority, and also compelling chemists to notify in a similar manner to medical men; and so the law stands. So far, apparently, the public have taken kindly to the notification of tuberculosis, the part of the business they would probably resent first would be the notification of the local authority on account of the increased publicity. A certain latitude, however, is allowed medical men in notifying tuberculosis, and the Chief Health Officer, Dr. Mason, issued the following circular to medical men:—

DEPARTMENT OF PUBLIC HEALTH,

Head Office: Wellington, 10th February, 1902.

NOTIFICATION OF TUBERCULOSIS.

SIR,—As the object of placing tuberculosis upon the list of notifiable diseases was to enable the Department to obtain some measure of control over the sufferers so that their sphere of infection might be lessened, only such cases as you consider capable of disseminating the disease, need be notified. Cases in the early stages where there is no expectoration, and therefore little danger to the general public, need not be recorded. I should esteem it a great favour, however, in order that the Department may obtain a correct estimate of the magnitude of the danger we have to face, if you would unofficially inform me of any cases in other than the infective stage.

There is no desire to make the lot of the poor sufferer from consumption harder than it unfortunately at present is, but you will clearly see that to allow whole schools to be infected, to permit workers among food-stuffs to continue their occupation when in a markedly infective stage of the disease unless properly safeguarded, would be unfair to the general public. Hardship and increase of suffering may in some instances result, but you may rest assured everything that can be done by the Department to mitigate and lessen these will be done.

As no great reform in respect to this disease can be expected unless with your hearty co-operation, I invite your help in the war against this most formidable foe.

I have the honour to be,

Sir,

Your obedient servant,

J. MALCOLM MASON, M.D.

Chief Health Officer.

When the disease has been notified section 27 of the Public Health Act provides for cleansing and disinfection of rooms, etc., if the Health Officer orders such to be done. Section 35 provides the penalty for selling infected things or letting houses where an infected person is lodging. Action has already been taken under this last section in a case of phthisis. Section 46 deals with overcrowding. The Factories Act 1901, section 44, requires Inspectors of Factories to notify the Health Officer if any person engaged in manufacturing, handling, or delivery of any article for human consumption is in a state of health likely to convey disease germs or any contamination to such article. The person reported has to be medically examined, and unless safe must not follow his or her occupation. The occupier of any factory must not employ any such person. Action has already been taken in a case of phthisis also under this section. Section 48 deals with the manufacture or working up of goods or materials in infected dwelling houses. The foregoing is a summary of the parliamentary enactments bearing on human tuberculosis. So far no information is to hand showing the number of cases existing as notified under the Act.

Outside the special laws dealing with the evil, the following auxiliaries exist:—The Government Laboratory in Wellington will examine sputum, etc., free of charge, and in time, no doubt, each health district will have its central laboratory doing the same thing. Then the local bodies have power to make by-laws against spitting in public places. Wellington and Christchurch have recently made such by-laws, and Auckland and Wanganui are moving in the same direction, and, doubtless, many other places will follow a similar course. The railway authorities have no by-laws or regulations dealing with this matter.

In the present state of opinions regarding the relation between bovine and human tuberculosis no article on this subject would be complete which did not take into account measures aimed at the eradication of tuberculosis in animals. Many towns have established municipal abattoirs, and probably at no distant date every town of any size will have its own abattoirs. The Abattoirs and Slaughter Houses Act of 1894 provides for supervision of

slaughtering by qualified Government Inspectors, who have power to deal with carcasses of tubercular animals. The Dairies Industry Act of 1898 deals with the subject of milk from diseased animals, the insanitary conditions of milk shops, and the presence of infectious disease in such places.

The Veterinary Department is engaged in an active crusade against tuberculosis in herds, under the direction of Mr. J. A. Gilruth, Chief Veterinarian, who has supplied the following information:—

Speaking generally, I should say that of cattle under three or four years of age about 5 per cent are affected. But taking dairy cows of all ages, that is, from three to ten or twelve years, about 10 per cent, are affected.

The means which we use to combat the disease are: (1) Condemnation and slaughter of all animals showing clinical symptoms of the disease; (2) the application of the tuberculin test in all doubtful cases; (3) the application of the tuberculin test to certain herds the owners of which desire to know the condition of their herds, and isolation under supervision of all animals that react; (4) in certain cases where we have reason to believe a considerable number of animals in a herd are affected we apply the tuberculin test on our own initiative, and slaughter the reacting animals. I consider, however, that the first item is the most effective, for I am of opinion that in the bovine animal, if the disease is not advanced to such an extent as to induce any symptoms whatever, there is not much danger of the infection of other animals. The only drawback to this plan is that there are not enough trained inspectors in the Colony to enable us to have a periodical examination of all cattle, especially dairy cows, so that an animal may have been affected to such an extent as to be a danger to the others before the advent of an inspector enables it to be destroyed. As against this, however, the knowledge that we give half compensation for all animals destroyed in the field is an inducement to the farmer to report any case of which he might have a suspicion.

The fact that in this colony the percentage of cattle infected with tuberculosis is much lower than in most civilised countries, provides a special inducement for the waging of a vigorous campaign against the disease, since it offers a more reasonable prospect of enabling us to effect an appreciable reduction in its ravages amongst our herds, and also to further the safeguarding of the health of consumers of our dairy products, both in the colony and elsewhere.

The establishment of sanatoria for the treatment of consumption is engaging the attention of the Government, and the following memorandum was issued to the District Health officers on September 13th, 1901:—

DEPARTMENT OF PUBLIC HEALTH,
Wellington, September 12, 1901.

MEMORANDUM FOR DISTRICT HEALTH OFFICERS.
SANATORIUM FOR THE TREATMENT OF CONSUMPTIVES.

The Government have under consideration the question of erecting one or more sanatoria for the open air treatment of consumption. In order that the greatest good may be obtained from the institution, it is necessary that the site or sites should be the very best

available. I should, therefore, be glad if you would be good enough to obtain from the various medical men and others in your neighbourhood capable of giving information of value, if there are any places in their district suitable for such institutions.

I should also be glad to have any recommendations you may think fit to make with respect to this most important matter. The factors to be kept in view are:—

(1.) CLIMATIC—

1. Sunshine.
2. Freedom from strong winds.
3. Rainfall.
4. Free porous soil.
5. Elevation.

(2.) GET-AT-ABLENESS.

J. M. MASON,
Chief Health Officer.

Dr. Mason, Chief Health Officer, has reported on the sites most suitable, and his recommendations have been forwarded to the Minister of Public Health. Probably the site of the first sanatorium will be Cambridge, in the Auckland district, for the North Island.

Though the Government, through their recently formed Department of Public Health, are doing their best to cope with tuberculosis, and most public and private hospitals are carrying out as far as possible the open-air treatment of phthisis, yet it is to medical men of all ranks that we have to look chiefly for the eradication of the evil, and although prevention is better than cure, still the fight must be unflinching carried on in both directions—prevention will go on *pari passu* with increased curative skill, the less manufacture and casting off of tuberculous material the less the risk of infection.

BRITISH MEDICAL ASSOCIATION NEWS.

PROCEEDINGS OF AUSTRALASIAN BRANCHES.

New South Wales.

THE Annual Meeting was held on Friday, 4th April, 1902, at the Royal Society's Room. Present: Dr. J. Foreman (President), in the chair; Drs. Binney, Maitland, Crago, Jamieson, Parry, The Hon. H. N. MacLaurin, Hinder, Hankins, Maitland, McDonagh, H. Browne, Chisholm, Megginson, MacPherson, Stokes, Abbott, Dick, Rennie, Spark, Pockley, John Harris, Sawkins, Corlette, Newmarch, West, Nolan, F. W. Hall, Morgan Martin, G. A. Marshall, Tilley, Blackwood, Brady, Gordon MacLeod, Ludlow, Cosh, Frizell, Taylor Young, Gordon Craig, H. H. Marshall, Kirkland, Mills, Bennett, Lipscomb, Stacy, Sandes, Ayres, and others.

Visitor: Dr. Stephen.

The minutes of the previous meetings were read and confirmed.

The PRESIDENT announced the election of the following gentlemen:—Dr. R. T. Michell, Wee Waa; Dr. C. C. Cocks, Wentworth; Dr. Louis Vallee, Inverell; Dr. E. B. Bardsley, Waverley; Dr. H. M. Anderson, Sydney Hospital; Dr. G. S. Samuelson,

Armidale; Dr. Margaret M. White, Children's Hospital, Adelaide; Dr. R. L. Davies, Children's Hospital, Members nominated for election: Dr. G. E. Miles, Rydalmere; Dr. B. D. Heggaton, Murrumburrah; Dr. D. Kerr, Forbes; Dr. H. Terry, Kiama; Dr. J. J. O'Keefe, Kogarah; Dr. H. M. Dalton, Murrumburrah; Dr. M. H. Atock, Coolamon; Dr. H. Armstrong, Tamworth; Dr. A. E. Perkins, Marrickville; Dr. H. Blaxland, Gladesville; Dr. W. Ramsay Sharp, Sydney Hospital; Dr. A. A. King, West Maitland; Dr. Norman J. Dunlop, Newcastle.

REPORT OF THE COUNCIL FOR THE YEAR 1901.

GENTLEMEN,—In presenting the report on the proceedings of the Branch for the year 1901, the Council desire to congratulate the members on the steady progress made during the year under review, especially with regard to the unity of the profession generally.

There have been ten general, four special, and twenty-one Council meetings held during the year, and all these meetings have been well attended, showing clearly that the interest of the members is fully maintained in the work of the Branch. There were twenty papers read, and fourteen exhibits shown, on various subjects of more than ordinary interest to the members.

There are 406 members on the roll, as against 394 in the previous year, being an increase of 12. There were ten resignations, eight deaths (Drs. C. D. Clark, M. J. Clune, J. E. Cruise, R. Hunter, Joseph Stapleton, C. Sturt, A. E. Walsh and H. G. A. Wright), and six struck off for non-payment of subscriptions. Thirty-six members were elected.

It is with regret we have to record the death of a member of Council (Dr. Charles Dagnall Clark), who always took the deepest interest in the many questions submitted to the Council for consideration, and whose calm judgment will be missed by the members of Council in their deliberations. The vacancy caused by Dr. Clark's death was filled by the election of Dr. Newmarch.

The death of Dr. H. G. A. Wright removes from our list one of the founders of the Branch. At the first regular meeting of the Branch in 1880 the late Dr. Wright was appointed a member of Council and the first Hon. Treasurer of the Branch.

Conferences were held with representatives of the Lewisham Hospital on the subject of private wards, and with the Directors of the Peoples' Prudential Benefit Association on the question of the profession taking over the working of the Association. Some correspondence took place with the Directors of the Sydney Medical Institute, M.U.I.O.O.F., with regard to the question of the income limit and the increase of the payments to medical officers.

During the year a change has been made in the management of the *Australasian Medical Gazette*. Dr. Knaggs resigned the editorship, and your Council deemed it advisable that the appointment of the editor should be in the hands of the Council. With this end in view, an extraordinary meeting of the Branch was held on 20th September to alter the Articles of Association. The necessary alteration having been made, the Council appointed Dr. G. E. Rennie as editor. During the interim between the resignation of Dr. Knaggs and the appointment of Dr. Rennie, Dr. Crago kindly undertook the work of editing. The thanks of the members are due to Drs. Crago, Knaggs, Worrall and Rennie for their work in connection with the *Australasian Medical Gazette*.

A special general meeting of the members of the Branch and the unattached members of the British Medical Association was held on Friday, 3rd May, for

the purpose of considering certain alterations in the constitution of the Home Association. The resolutions submitted by the Council were adopted.

A general meeting of the medical profession was held on the 22nd March, for the purpose of considering the relations of the Medical Institute of the Manchester Unity I.O.O.F., when it was decided to support your Council in its efforts to induce the Institute to pay their medical officers at the rate fixed as the minimum for lodge attendance in Sydney. The Institute was thereupon declared, in accordance with Article No. 36, to be one prejudicial to the interests of the profession, and the medical officers (Drs. Murray Will, Kater, Palmer and John Harris) resigned their positions.

A special general meeting of the profession was held on the 17th April, for the purpose of forming an Association of Medical Officers to the various Friendly Societies.

A special general meeting of the members of the Branch was held 10th January, 1902, to discuss the question of the proposed Australian Medical Association, which was to be submitted to the Medical Congress in Hobart in February, when it was decided to oppose the proposal.

A special general meeting of the Branch was held on the 7th March to consider the relations of the Australian Natives' Association to the profession, when the following resolution was unanimously carried:—

"That this Branch of the British Medical Association, having re-considered the question of contract medical attendance on members of the Australian Natives' Association, hereby re-affirms the decision of the Council meeting of the Branch of 7th August, 1900, in declaring the Australian Natives' Association a society prejudicial to the interests of the medical profession in accordance with Article of Association, No. 36."

Drs. Wm. Chisholm and W. H. Coutie were appointed to represent the Branch on the Council of the Home Association during their stay in England, and Drs. Wm. Chisholm and Pain were appointed to represent the Branch at the annual meeting of the parent Association.

The Hon. Treasurer's statement shows a credit balance of £203 11s. 6d. on the year's proceedings, and the *Australasian Medical Gazette* account has a credit balance of £51 6s. 9d.

The list of papers and exhibits, together with the attendance of Councillors at Council meetings, is hereto appended.

J. FOREMAN, President.

G. T. HANKINS, Hon. Secretary.

PAPERS READ BEFORE THE BRANCH DURING THE YEAR 1901.

Dr. Mills—On Appendicitis from the point of view of a Physician.

Dr. Rennie—Notes on a case of Cerebellar Defect (living exhibit).

Mr. Clubbe—Notes on a case of Mikulicz Amputation of Foot (living exhibit).

Dr. Maitland—Report of a case of Extra-peritoneal Ureterolithotomy.

Dr. J. B. Cleland—Notes on a case of Cerebro-spinal Meningitis.

Dr. Binder—On Tubercular Disease of the Bladder and Genitals (illustrated).

Mr. R. T. Thring—On Appendicitis from a Surgeon's point of view.

Dr. Camac Wilkinson—The climates of the sea coast of New South Wales in Relation to the Treatment of Pulmonary Tuberculosis in the early stages.

Dr. Pockley—Notes on a case of Primary Neoplasm of Optic Nerve Sheath—removed by Krönlein's Operation—with Preservation of the Eye and Good Vision.

Dr. W. A. Burditt—Notes on a case of Intussusception.

Dr. Worrall—Spontaneous Rupture of the Uterus successfully treated by Abdominal Section.

Dr. Worrall—Notes on a case of Foreign Body removed from the Peritoneal Cavity.

Dr. Jamieson—Brief account of some cases illustrating the widespread infectivity of the *Pneumococcus* of Fränkel.

Dr. Sinclair Gillies—Two cases of Laryngeal Paralysis, accompanying Mitral Stenosis (exhibits).

Dr. Binder—Cases illustrating the surgical treatment of Gall Bladder and Bile Ducts.

Drs. Rennie and Flynn—Case of Acromegaly.

Dr. W. J. McKay—Notes on a successful case of Partial Hepatectomy.

Mr. G. T. Hankins—Case of Thyrotomy and Evisceration of Larynx for Epithelioma (living exhibit).

Drs. Sinclair Gillies and Clubbe—Case of Diaphragmatic Hernia.

Dr. R. Steer Bowker—Case of Cholecysto-Colostomy, with some remarks on the Surgery of the Bile Ducts.

EXHIBITS.

Dr. Binney—Case of an old man with a rare form tumour of the back of twenty years' standing.

Dr. W. J. McKay—Tumour weighing 27 lbs. successfully removed by the interscapulo-thoracic amputation.

Dr. Sydney Jamieson—Pathological specimens.

Dr. Sydney Jamieson—Placenta showing effects of syphilis.

Dr. Pockley, for Dr. Gordon Craig—Case of colloid degeneration of both optic discs in a man aged 37.

Dr. Pockley—Case of injury to the eye-ball in a girl.

Dr. Pockley—Case of tumour of nerve sheath—removed by Krönlein's operation.

Mr. Hankins—Patient on whom he had performed the operation of complete extirpation of the larynx for epithelioma.

Mr. Clubbe—Patient on whom he had performed an osteo-plastic re-section of the foot, by the method of Mikulicz.

Mr. Clubbe—Child aged 15 months from whom he had removed a renal sarcoma, weighing two pounds.

Mr. Clubbe—Ruptured kidney, removed from a boy aged seven years.

Dr. J. B. Cleland—Fœtus with tubes and placenta—removed by Dr. Foreman.

Dr. J. B. Cleland—Microscopic sections and films.

Dr. Worrall—Crochet hook—removed from the peritoneal cavity.

DEMONSTRATIONS.

Mr. Hankins—Phonating apparatus, arranged for a patient on whom he had done a total extirpation of the larynx.

Dr. Sydney Jamieson—Demonstration of various pathogenic and saprophytic micro-organisms on potato medium.

Dr. Sydney Jamieson—Microscopic demonstration of Fränkel's pneumococci in pericardial exudate and film of same organism grown in blood agar.

Dr. Sydney Jamieson—Demonstrations of pathological specimens—

(a) Extensive intussusception of greater portion of ileum through ileo-caecal valve; (b) Secondary sarcoma of the lung—showing extensive hemorrhages into substance of growth;

(c) Kidney from a case of sewer gas poisoning—showing vermilion red discoloration from carbonic oxide hemoglobin;

(d) Large mucous polypus of naso-pharynx removed by Dr. Brady.

THE AUSTRALASIAN MEDICAL GAZETTE.

THE *Gazette* has now completed the 20th year of its publication, and although it cannot be said that it has "pursued the even tenor of its way," still the year has been a fairly satisfactory one financially. In August Dr. Knaggs resigned the editorship, a post which he had filled for 6½ years, and after an interval of three months Dr. Rennie was appointed by the Council to fill the vacancy. The new Editor has entered upon his duties very vigorously, and has made several changes in the arrangement and nature of the contents, which it is hoped will make the *Gazette* more appreciated by its readers. As predicted in last year's report, there has been some falling off in revenue, due to the numerous resignations from the Victorian Branch, but the inclusion of the West Australian Branch as a subscriber to the *Gazette* for its members has to a large extent made up for the loss from Victoria. It has been the custom ever since the purchase of the *Gazette* by the Branch to pay the monthly account for printing by a promissory note at three months, but during the past year all the outstanding promissory notes have been paid off, and the printing account is now paid monthly by cheque. The payment of 15 monthly printing accounts in one year has necessarily disarranged the finances, hence the smaller cash balance than usual at the end of the year. The balance-sheet and profit and loss account, duly audited, will be found herewith.

W. H. CRAIG,

December 31st, 1901.

Manager.

STATEMENT OF RECEIPTS AND EXPENDITURE FOR THE YEAR ENDING DECEMBER 31st, 1901.

RECEIPTS.			EXPENDITURE.		
	£	s. d.		£	s. d.
To Balance forward	175	0 11	By <i>British Medical Journal</i>	426	9 6
„ Subscriptions received... ..	870	3 6	„ <i>Australasian Medical Gazette</i>	263	19 9
„ Interest received	8	13 8	„ General Expenses—including Rent, Printing, Stamps, Assistant Librarian, Refreshments, &c.	162	18 4
„ Donation, North Sydney Medical Association	5	0 0	„ Credit Balance	203	11 6
„ Donation, Eastern Suburbs Medical Association	1	1 0	„ In Savings Bank	£186	13 8
„ Amount added for Exchange ..	2	0 0	„ Bank of Australasia	16	12 0
			„ Petty Cash	0	5 10
				<u>£203</u>	<u>11 6</u>
	<u>£1,061</u>	<u>19 1</u>			
				<u>£1,061</u>	<u>19 1</u>

Examined and found correct,

H. L. MAITLAND, }
A. JARVIE HOOD, } Auditors.

March 25th, 1902.

W. H. CRAGO, Hon. Treasurer.

"THE AUSTRALASIAN MEDICAL GAZETTE"

BALANCE SHEET FOR THE TWELVE MONTHS ENDING DECEMBER 31st, 1901.

	£	s. d.		£	s. d.
To New South Wales Branch British Medical Association	465	14 10	By Goodwill Account	1,150	0 0
„ Sundry Creditors	234	4 6	„ Sundry Debtors	545	1 2
„ Advertisement Revenue Account, representing advertisements de- bited this account, but unexpired as on 31st December, 1901 ...	107	3 8	„ Cash at Bankers	45	15 6
„ Reserve for Bad Debts	90	0 0	„ „ in hand... ..	5	11 3
„ Profit and Loss Account	849	4 11			
	<u>£1,746</u>	<u>7 11</u>		<u>£1,746</u>	<u>7 11</u>

DR.	PROFIT AND LOSS ACCOUNT.					CR.	
December 31st, 1901.	£	s.	d.	December 31st, 1900.	£	s.	d.
To Rent and Gas	47	7	6	By Balance	828	1	3
„ Printing	678	17	0	December 31st, 1901.			
„ Salary	52	0	0	„ Revenue from Subscrip-			
„ Postages	48	8	6	tions	£708	16	4
„ Bank Exchange	0	19	5	„ Advertisements	500	18	2
„ Discounts	70	2	10				
„ Expenses of Management, including							
Editor's and Manager's Salary...	250	15	7				
„ Provision for Bad and Doubtful							
Debts	40	0	0				
„ Balance	849	4	11				

10th January, 1902.

H. W. CHAMBERS, SUPERVISING ACCOUNTANT,
Royal Exchange, Sydney.We have examined the books and vouchers of the *Australasian Medical Gazette* and certify to the correctness of the above Balance-Sheet.H. L. MAITLAND, }
A. JARVIE HOOD, } AUDITORS.

The PRESIDENT appointed Drs. Sawkins and MacPherson as scrutineers, and Drs. Stokes and Corlette as assistants.

The Council's Report was taken as read.

Dr. JAMIESON moved the adoption of the Report, which was carried unanimously.

Dr. CRAGO moved the adoption of the Statement of Accounts, which was adopted.

The PRESIDENT read his address. (See page 165.)

The Hon. Dr. H. N. MACLAURIN, M.L.C., begged to move a hearty vote of thanks to the retiring President, Dr. J. Foreman, for the very excellent address he had given them. The speaker regretted he was not in the habit of attending the meetings of the Branch more frequently. He could, however, say that he was the oldest member of that Branch present. Referring to the address, he urged the members not only to approve of the address, but to resolve on carrying out the principles laid down. He had no hesitation in saying that if this course was adopted, and the profession maintained an unbroken front, that even the gates of hell would not prevail against them. The objects these so-called friendly societies had in view were the obtaining of medical benefits for next to nothing. Such objects were not of new experience—the public generally desired to get a good thing if it could for nothing; but the medical profession had its rights as well as other sections of the public, and the consistent action of the profession would prevent all the one-sided bargaining sought to be carried out by the Australian Natives' Association. The speaker reiterated the hope that the address would be seriously taken to heart by members, with the resolve to act on and carry out to the uttermost the advice it contained, and he believed that every respectable member of the profession would become a member of the British Medical Association before the year was at an end. He was most happy to propose a hearty vote of thanks to the late President for his most excellent address.

Dr. WM. CHISHOLM seconded the vote of thanks for the address, which was one quite after his own heart.

Dr. CRAGO proposed that Sir James Graham, Drs. E. J. Jenkins, and Dr. Jarvis Hood, represent the Branch at the Annual Meeting of the Home Association at Manchester.

Mr. HANKINS demonstrated his phonating apparatus upon three patients who had undergone complete extirpation of the larynx.

The PRESIDENT announced the result of the election:—President, Dr. G. E. Rennie; Vice-President, Dr. Brady; Councillors: Drs. Hankins, Crago, Worrall, Foreman, Fiaschi, Beeston, Dick, Newmarch, Hinder, MacCormick, Jamieson, and Pockley; Auditors: Drs. F. W. Hall, and F. J. Sawkins.

A vote of thanks was accorded to the Scrutineers.

COUNCIL MEETINGS.

THE Council met at the Association Rooms on Friday, 21st March. Present: Drs. Foreman, Rennie, Crago, Jamieson, Newmarch, Worrall, Hinder, Brady, Hankins, Fiaschi.

The minutes of the previous meeting were read and confirmed.

A letter was read from the Assistant-Secretary, resigning his position.

Dr. CRAGO proposed, and Dr. NEWMARCH seconded—“That the resignation of the Assistant Secretary be accepted with regret.”—Carried.

Letter from the Metropolitan Medical Society was read asking that the Commonwealth Medical Benefit

Society be declared prejudicial to the interests of the medical profession.

Letter was also read from Mr. Rafton, Secretary of the Commonwealth Medical Benefit Society.

Resolved—“That the Commonwealth Medical Benefit Society be declared prejudicial to the interests of the medical profession, in accordance with Article of Association No. 86.

Letter was read from Dr. Coutie, suggesting that similar benefits to those of the Friendly Societies be introduced into the Sydney and Suburban Medical Benefit Association.—Letter referred to the Sydney and Suburban Medical Association.

Letter from the Civil Ambulance Association relating to the King Edward Hospital.

Letter from Mr. Bruck was read relating to the Arbitration Act.—Resolved that the letter be referred to Dr. Todd for his opinion as to the legal aspect of the matter, and that Mr. Bruck be thanked for his communication.

Letter from a member, stating that the medical men of Parramatta and district had unanimously agreed to uphold the stand taken by the Branch on the question of the Australian Natives' Association.

The question of the Defence Fund was referred to the Medical Union.

New members elected:—Dr. Michell, of Wee Waa, and Dr. Cocks, of Wentworth.

The Council met at the Association Rooms on Tuesday, 8th April, at 8.30 o'clock. Present: Drs. Rennie, Crago, Fiaschi, Worrall, Hankins, Brady, Dick, Hinder, Newmarch, MacCormick, Jamieson, Foreman, and Pockley.

The minutes of the previous meeting were read and confirmed.

Members elected: Drs. G. E. Miles, R. D. Heggaton, D. Kerr, J. J. O'Keefe, H. M. C. Dalton, M. H. Atcock, H. Armstrong, A. E. Perkins, H. Blaxland, W. Ramsay Sharpe, A. A. King, N. J. Dunlop, and Professor Welsh.

Resolved—“That Mr. Hankins be Hon. Secretary and Dr. Crago be Hon. Treasurer for the ensuing year.”

Resolved—“That Dr. R. Worrall be authorised to countersign cheques on the *Gazette* Account.”

Dr. Rennie resigned the Editorship of the *Gazette*.

Resolved—“That Dr. G. E. Rennie be re-elected Editor of *The A. M. Gazette*.”

Letter was read from the North Sydney Medical Association with reference to certain members of the British Medical Association meeting medical men on the ostracised list.

Resolved—“That the writer be asked to name the members complained of, and the occasions.”

Letters were read from Dr. Bardsley, of Waverley, and Dr. Barber, of Penrith, stating that they had given up the Australian Natives' Association forthwith, sacrificing salary in lieu of notice.

Dr. Todd's opinion on the question of the Arbitration Act and the registration of the Branch was read.

Resolved—“That Dr. Todd be thanked for his trouble, and the opinion placed on the minutes.”

South Australia.

THE usual monthly meeting was held at the University on 27th March, at 8 p.m. Present: Drs. J. C. Verco, Sweetapple, Watson, C. H. Souter, W. A. Verco, Angus Johnson, F. Magarey, Todd, G. Verco, S. Verco, J. A. G. Hamilton, Morgan, Cavanagh-Mainwaring, Anstey Giles, Good, Brummitt, Cudmore, Smeaton, Symons,

Fischer, G. Hayward, A. A. Hamilton, Marten, Jay, London, Evans, H. Russell, W. Hayward, Gault, Scott, Poulton, and Gunson (Hon. Sec.)

Visitors: Drs. Shaw, White, and Hornabrook.

Exhibits were shown by Drs. Todd, Morgan, Watson, Jay, C. H. Souter, and Johnson.

Minutes of previous meeting were taken as read, and signed.

Professor WATSON showed:—

1. *Skull of a Kaffir Scout*, *et.* 19, showing the extensive fragmentation of bones of face produced by a soft-nosed small calibre bullet. Death resulted from attempted replacement of the scattered fragments of both jaws without a preliminary tracheotomy.

Well-worn bandolier repaired with green-hide, containing illicit bullets, produced by tampering with the legitimate military article.

2. *Skull of a Kaffir* killed in a scrimmage with a jealous husband. There is a recent stellate depressed fracture of the inner table of the right parietal bone, without any depression of the corresponding portion of the outer table where there is a very fine circumferential fissure surrounding the area of a shilling. This paradoxical lesion was produced by a knob-kerri. Death was due to concomitant internal injuries (hæmothorax, &c.)

3. *Cannon Bones* from two horses. In each case a piece of wire encircles and is deeply embedded in the bone, showing that the animals must have torn themselves free and survived for months after entanglement in a wire fence.—Dr. ANGAS JOHNSON.

4. *Malignant Pancreatic Cyst* (intra-cystic growths) from an elderly lady. It presented in the most common situation, viz., between the transverse colon and stomach, and was therefore covered by the anterior layer of the great omentum. Removal was not attempted. In a case a few months ago, also under Dr. London, after a futile attempt at extirpation, a successful result was obtained by marsupialisation (in the absence of intra-cystic growth.) In that case the tumour presented under the transverse colon. I have once seen one present above the stomach. In Australia the usual diagnosis is hydatid, but I have seen the stomach washed out prior to operation in the belief it was of gastric origin, and I once diagnosed one as an ovarian cyst.

5. *Perfect pelvic floor* as left after hysterectomy for a big myoma eight days previously. The tied uterine arteries, as usual, are occupied by clot, whereas the corresponding veins are empty. The ovarian veins, on the contrary, are full of clot. The intestines had been left in a faulty position after a prolonged operation in the Trendelenburg position. In consequence of the vomiting three interrupted cat-gut sutures had become untied in the aponeurotic layer, but the continuous suture in the peritoneum and the cutaneous sutures had held. Re-opening the abdomen was proposed, but rejected.

The following specimens bear on Dr. Jay's interesting case of pregnancy in one half of a double uterus:—(In a similar case to his I have seen another friend of mine inadvertently tie and divide the left ovarian vessels before realising the condition; fortunately the uterine vessels of that side sufficed, single-handed, to carry the pregnancy to a happy termination several months later.)

6. *Myomata bicornis uteris*, in which the angle of junction of the two cornua is occupied by a single myoma the size of an emu egg.

7. *Myomatous uterus*, which, when the abdomen was opened, simulated a double uterus pregnant on the right side. The larger portion to the right is a soft,

ever-increasing myxomyoma of the uterine body; that on the left is a quiescent lateral fibroma, whose appearance antedates that on the other right side by several years. As the round ligaments appeared on the lateral aspects of the larger mass it was evident that the smaller mass could not be a second (left) uterus, whether pregnancy existed or not.—Dr. J. A. G. HAMILTON.

8. *Bilobate myomatous uterus* resembling a bicornis uterus, more especially as each round ligament arises from the lateral (pelvic) aspect of its respective growth.—Dr. O'SULLIVAN.

9. *Chorionic cast* extruded from a left cornu three days after delivery of a living child from the alternate (right) one.—Dr. VON HAGENAUER.

Dr. C. E. TODD exhibited a patient, who had recurrent schirrus of breast, and had been brought before the Association six months ago before she was subjected to oophorectomy and thyroid feeding. Her condition then will be fresh in the mind of members. After the operation all her symptoms were much relieved, with the exception of the ulceration on the front of the sternum. This showed no tendency to heal, in fact became deeper. The ulcer was subjected to numerous exposures of the X-Rays by Dr. Gunson, and is now soundly healed. This case was recorded at the Intercolonial Medical Congress at Hobart.

The PRESIDENT reported that the Branch's invitation on behalf of the profession was accepted at Hobart Congress for the next session to be held in Adelaide in 1905, Professor Sterling being the President elect.

Several motions were carried relating to the preliminary work in connection with the next Congress, and it was decided to call for nomination for the executive committee and office-bearers, the election to take place at the May meeting of the Branch.

Ballot.—Drs. Sydney M. Verco, Harry F. Cook, and C. M. Verco, were elected to the Branch.

Dr. MARTEN read his paper "Cases of Gastric Fistula," and the discussion on it was postponed till next meeting. (See page 182.)

Dr. C. H. SOUTER then read an interesting paper on "Stereographic Photography and Medical Work," which was accompanied by numerous and excellent stereographs. He was accorded a hearty vote of thanks.

Dr. JAY then read a paper on "Pregnancy in a Double Uterus." (To appear in a future issue.)

Queensland.

A MEETING of the Branch was held at the School of Arts, Toowoomba, on Saturday, April 5th, with the following attendance:—Drs. Roberts, Falkner, Nicoll, Freshney, and Harding, of Toowoomba; Dr. Flynn, of Ipswich; Drs. Wilton Love, Byrne, Sutton, Hawkes, Robertson, Carvosso, and Brockway, of Brisbane. Owing to an unfortunate misunderstanding, three or four members of the branch were prevented from being present at the meeting.

Dr. ROBERTS was voted into the chair, and cordially welcomed the Brisbane and Ipswich members. He expressed his pleasure at meeting them, and his conviction of the benefit to be derived from the closer fellowship which such meetings produced.

The minutes of the last meeting were read and confirmed.

The following were elected members of the Branch:—Drs. Edith Ure, Pring, Hammond, and Zwar. Dr. Sutler was nominated for membership.

Dr. FALKNER read notes of cases of epidemic jaundice (to appear in a future issue), and an interesting discussion was entered into by Drs. Wilton Love, Hawkes and Robertson.

Dr. BYRNE read a most useful and entertaining paper on his "Medical Experiences in London and America," for which he received a hearty vote of thanks. (To appear in a future issue.)

A vote of thanks to the Chairman brought an interesting and memorable meeting to a close.

Victoria.

THE monthly meeting of the Victorian Branch of the British Medical Association was held on Wednesday evening, March 19th.

Dr. MACANSH read "Notes on an Outbreak of Typhoid Fever in 1901." (See future issue.)

Dr. NIELD was pleased to find that local reports of infectious diseases were so closely kept as Dr. Macanish had kept them in this case. He considered such a paper most valuable and expressive, and he hoped that close inquiry and examination, would always be the rule in all infectious cases.

The paper was discussed by Drs. BLACK, CUSOADEN, VANCE, and BRYANT, and Dr. MACANSH replied.

Dr. Vance's paper was held over until the next meeting of the Branch.

New Zealand.

At the Sixth Annual Meeting of the New Zealand Branch of the British Medical Association at Dunedin, February 2nd, the President's (Dr. Colquhoun) address dealt with the history of Medicine and Surgery, and traced the evolution, through past centuries, of present-day methods and science. Amongst the papers was one by Dr. Roberts on "Chloroform Administration," one by Dr. Ogsten on "Sanatoria for Consumptives," and one by Dr. W. M. Stenhouse on "Consumption Theories." After the business portion of the Congress was over, the delegates paid a visit to the Inebriates' Home, at Waitati, on the 5th. Great improvements have and are now being made. The visitors were greatly pleased with all they saw. On the 6th a visit was paid to Seacliff and Puketeraki, and on the 7th the visiting members proceeded to Lake Wakatipu.

INTERESTING evidence was given by Dr. Barrett to the University Inquiry Commission now sitting in Melbourne on the subject of extending scientific teaching. Dr. Barrett pointed out that the new mining school was only barely equipped to undertake instruction, and did not compare with that of Sydney. He thought it a great fault, seeing that this State depended mainly upon its mineral productions and what was raised from the soil, that the University made no effort to train men to follow these natural pursuits. The President questioned whether, in a time of financial stress like the present it was opportune to consider such matters. Dr. Barrett replied that one of the greatest universities in the world, that of Berlin, was founded when Napoleon was ravaging Germany. The Teutonic people, he said, realised that they were only going to pull Germany out of the fire by cultivating brains. The President: "Scotland was a very poor country when it started its university." Sir John M'Intyre: "There was no poverty in brains there." Dr. Barrett suggested further that colleges for dental, veterinary and public health should be incorporated with the University. Owing to the profession being overstocked, its great work in the near future would lie in the teaching of special science subjects.

At the last meeting of the Women's Hospital Committee, Melbourne, it was decided to ask the honorary medical staff to nominate one of its members to fill a vacancy on the Committee.

REPORTS OF SOCIETIES

MEDICAL DEFENCE ASSOCIATION OF TASMANIA.

Annual Report for the Year 1901.

THE Council has the satisfaction of reporting that the Association has made a successful beginning. During the first year 36 members have been enrolled, and there have been no claims on the funds of the Association. Three meetings of members have been held during the year, at which the business was of a purely formal character, in connection with the formation of the Association. The Council record with regret the loss of one of its most active members by the death of the late Dr. B. S. Bright. One member of the Association, Dr. Allnutt, has left the State. It is to be hoped that now the Association is started, all the eligible members of the profession in Tasmania will avail themselves of its benefits.

OFFICE-BEARERS FOR 1902.—President, Hon. Dr. G. H. Butler; Hon. Treasurer, Dr. A. H. Clarke; Hon. Secretary, Dr. W. W. Giblin; Members of Council, Dr. E. L. Crowther, Dr. J. E. Wolfhagen, Dr. R. G. Scott, Dr. G. Sprott, Dr. E. J. Crouch, Dr. G. H. Hogg, Dr. J. McCall; Auditors, Dr. F. J. Drake, Dr. E. J. MacGowan.

FINANCIAL STATEMENT.—The Hon. Treasurer, in account with the Medical Defence Association of Tasmania for year ending December 31st, 1901:—

RECEIPTS.

	£	s.	d.
36 Members' Subscriptions ..	18	0	0
Paid in Excess ..	0	0	6
Interest ...	0	4	7
	£18	5	1

EXPENDITURE.

	£	s.	d.
Printing ..	2	4	6
Stamps ..	0	18	0
Stationery ..	0	16	9
Bank Book ..	0	0	6
Exchange on Cheque ..	0	0	3
Balance in Savings Bank ..	14	5	1
	£18	5	1

Examined and found correct, February 4th, 1902.

ERNEST J. CROUCH.

ARTHUR H. CLARKE, Hon. Treasurer.

The objects of the Association are as follows:—

- I. To support and protect the character and interests of legally qualified medical practitioners practising in Tasmania.
- II. To promote honourable, and to discourage irregular, practice.
- III. To advise and defend, or assist in defending, members of the Association in cases where proceedings, involving questions of professional principle or otherwise are brought against them.
- IV. To consider, originate, promote, and support or oppose (so far as is legal) legislative measures affecting legally qualified medical practitioners, in their relations to the State or public, and for such purposes to take such steps as may be legal and expedient.
- V. In the attainment of the above objects to do all such things as are incidental or conducive thereto.

NEW SOUTH WALES MEDICAL BENEVOLENT FUND.

Dr. MAITLAND read the statement of accounts for the past year. The adoption of report was carried.

The following Committee were elected for the ensuing year:—Hon. Secretary, Dr. H. L. Maitland; Hon. Treasurer, Dr. R. L. Faithful. Members of Committee: Drs. Fiaschi, F. W. Hall, and Macdonald Gill.

THE TREASURER IN ACCOUNT WITH THE NEW SOUTH WALES MEDICAL BENEVOLENT FUND.

Dr.

CR.

1901.	£	s.	d.
To Balance brought forward March 31st, 1901	40	2	10
„ Subscriptions received from 31st March, 1901, to 31st March, 1902 ...	45	0	6

£85 3 4

1902—31st March.

At deposit in Savings Bank of New South Wales, as per Bank Pass Book, with interest added to 31st December, 1901 ...	117	16	2
„ Balance to credit current account at the Commercial Banking Co. of Sydney, Bathurst Street Branch, as per Pass Book 31st March, 1902 ...	48	18	0
„ Money available at present date	£166	14	2

1901.	£	s.	d.
By Money disbursed to various deserving cases as decided by the Committee from 31st March, 1901, to 31st March, 1902 ...	33	0	0
„ Stamps ...	1	7	10
„ Printing ...	1	2	6
„ Exchange on cheques ...	0	5	0
„ Bank fees ...	0	10	0
„ Balance to Cr. as per Bank Pass Book ...	48	18	0

£85 3 4

E. & O. F.—31st March, 1902.

Audited and found correct.

CYRIL E. CORLETTE.

R. L. FAITHFULL, Hon. Treasurer.

H. L. MAITLAND, Hon. Secretary.

THE MEDICAL PROFESSION AND THE A.N.A.

A well-known Melbourne practitioner writes as follows:—"If the society is a national association, what business has it with cheap medicine, any more than cheap weddings or funerals, or cheap civil servants? If it is a medical benefit society, why should it—because its members secure a doctor's services for 8d. a week—be allowed to pose as an exponent of the national and patriotic aspirations of the rising generation? There is no doubt whatever (in the minds of the A.N.A.) of their immense superiority over the M.U., I.O.O.F., etc., etc.; but though they exact extra attentions, they pay no more than the modest fees paid by the horny-handed section of the community. If they exercise no political influence, how is it that civil servants—when presidents of the A.N.A.—seem to be able to get leave at all times to go about the country opening new lodges?"

Another Victorian correspondent writes:—

"A more serious innovation is the establishment of the *Long Distance Club*. To instance a case, the town of X is some miles from Y; the district of Z lies less than half way—there was no medical man there. Two medical men in Y took clubs, also two in X, of which I was one. A branch of the A.N.A. was started at Z, and made overtures to the medical men, the two doctors in one town being played off against those in the other. It was arranged that we should all join on equal terms, and have lists. The terms were 24s. per annum to supply medicine (actually 16s. per member),

and a reduced mileage of 5s. per mile from X (the ordinary being 7s. 6d. per mile). When a few months had elapsed, the secretary said they could not afford 5s., and we must reduce to 2s. 6d. I declined and resigned. In consequence, I have completely lost any practice in that district, which is a community of wealthy farmers. They all send for my opponent, who is an Australian native!"

Drs. Bardsley, of Waverley, Barber, of Penrith, and Cocks, of Wentworth, have severed their connection with the A.N.A.

Mr. H. J. Cannington, who was elected vice-president of the Newcastle branch of the A.N.A. at the inaugural meeting a week or so ago, stated, says the *Newcastle Morning Herald* of March 18th: "That if there was to be any wrangling he would retire from the position. He quite disagreed with the attempt by the A.N.A. to fight the British Medical Association. If the Newcastle branch could not get over the threatened boycott by the local doctors, he thought the lodge would not achieve success, for he could not see that it would pay any other medical man, who had not an established practice, to take on the lodge.

The *Melbourne Herald* of March 22nd in a leading article speaks in contemptuous terms of the A.N.A. in New South Wales deigning to accept a wage limit, and says that, "Meanwhile, perhaps, a missionary might be spared from Victoria to help the authorities of the A.N.A. in New South Wales back to the region of commonsense!"

INTERCOLONIAL MEDICAL CONGRESS, SIXTH SESSION, HOBART, 1902.

FURTHER PROCEEDINGS OF SECTIONS.

SECTION I.

MEDICINE.

SANATORIUM TREATMENT OF CONSUMPTION.

Dr. A. H. GAULT (Adelaide), read a paper, entitled "A plea for the sanatorium treatment of consumption." He said there were at least 10,000 persons at the present time in Australia suffering from pulmonary tuberculosis in an active form, and we had sanatorium accommodation for only 150 of the poorer classes. The only provision throughout the whole continent for paying patients was one small home with seven beds. It was possible that the value of the open-air method had been over-estimated, but there could be no question of its great superiority over any previously tried. Most of their patients previously died, after many ups and downs, in the course of a few years—the death-rate must have been 90 per cent. Of the cases brought under sanatorium treatment, with only one lobe of one lung affected, he thought that they might safely say one-half were cured, but even this would mean the saving of over 1,000 lives annually in Australia alone. On the part of the public, there was a rooted objection to all kinds of institutions, which nothing would overcome but the firm attitude of the profession, backed up by actual results. The disadvantages of leaving home would be more than counter-balanced by a speedy restoration to health. There was no doubt that this form of treatment would embrace other kinds of disease. A sanatorium afforded a choice of climate and situation; a building thoroughly adapted for the purpose; strict medical supervision, careful nursing, regularity, and discipline. The things desired were climate and situation, plenty of sunshine, pure air, absence of strong winds. He was told that the site selected at Wentworth Falls, New South Wales, for the proposed sanatorium in New South Wales was subject to such strong winds that trees would not grow without proper protection. Other conditions required were avoidance of extremes of temperature, a bracing atmosphere, a dry, well-drained sub-soil. Excessive rainfall, or the prevalence of fogs, was a decided drawback, and must be avoided. It had been tried in Victoria to have one sanatorium suitable for summer and another for winter, but this was quite unnecessary, and a great waste of money. A properly constructed building would cost at least £200 per bed. A sanatorium erected with due regard to proper conditions would possess advantages most difficult to find in a private home. In a private house it was almost impossible to find a room suitable for a consumptive. Fresh air could be best secured by erecting a substantial stone building on the Nordrach plan—a single row of rooms with a passage behind. The front of the building should face the north, be sheltered by a verandah, not too wide, having glass over the windows of the rooms to admit sunlight in winter. All windows must be of the casement pattern, much larger than ordinary ones, and having a large fanlight over them, as well as over each door. At Nordrach the windows and doors took up about one-quarter of the wall space. It was only in the sanatorium that one could get strict medical supervision, careful nursing and feeding, combined with the regularity and discipline of an institution. The three cardinal principles of the open-air treatment were fresh air, good food and rest. How simple it seemed,

and yet how hard to secure in private practice. One of the requirements of a sanatorium was a good cook. No special diet was required, but it must be liberal and nutritious, and include plenty of meat, milk and butter. Rest was so important that they were apt to forget the value of exercise, but it was the due proportioning of these that was one of the main features of the Nordrach treatment. Rest was necessary for active disease, high temperature and losing weight, but to restore health, strengthen the circulation, develop the healthy part of the lungs, exercise was required. He thought he had said enough to prove the vast superiority of the sanatorium over the private open-air treatment of consumption, but it must be admitted a great deal depended on the medical superintendent. A young, inexperienced man, with a small salary, who only intended to hold the position for a short time, was not likely to make it a success. A man must have a special training, and be willing to devote his whole time and energy to the work.

The PRESIDENT said there was one sanatorium near Melbourne, but it had not grown to a large size, and was simply a charity.

Dr. CAMAC WILKINSON (Sydney) said he would like to have facts and results in support of the sanatorium treatment. He agreed with most of what Dr. Gault had said, but the physician who trusted in sanatorium treatment in a hard and fast way was lost. It was absolutely impracticable as a means of dealing with tuberculosis in the poor classes, among whom the disease was chiefly found. One could not expect the poor to go to a sanatorium when they were able to work. Sanatorium treatment was valuable if money and time were of no account. But was it not better to cure a patient in the climate in which he had to spend his life? Climate, *per se*, was not the important factor that it was at one time considered.

Dr. VEROO said that the open-air method of treatment was recognised as an advance in the treatment of tuberculosis. Personally he felt certain that the method was the best they had ever had, and the further they extended it the better for the phthisical patient. If they could impress its value upon the charitably disposed they might do much. In South Australia they had a sanatorium, which was a partial charity. But the sanatorium treatment was simply an accessory to other treatment.

Dr. HOVEY said he went to South Africa some years ago with lung trouble, and settled in the climate of a highland plateau. Subsequently, when he got to Sydney and was examined for life assurance they could not find in which lung there had been a cavity.

Dr. JARVIS HOOD suggested that the North Shore railway line was the best place for a sanatorium in New South Wales.

The PRESIDENT did not like to say anything about the management of the congress by the executive, but thought that the subject of sanatoria might have been given prominence to instead of cancer.

Dr. G. H. HOGG (Launceston) read a paper on "The Medicines of the Aborigines of Tasmania." He said: Backhouse mentions an old man or doctor who had for his instrument supply a stock of broken glass, which he used as lancets for superficial and deep scarification. This old gentleman suffered from some form of "fits," which were attributed to a devil, and made use of to impose upon his fellows—the first recorded example, doubtless, of a Tasmanian "quack." As to nursing, that was left to the women of the tribe; confinement cases were left in charge of one or more women; and the sick also were, if attended to at all, nursed by them, although frequently the sick person was left

behind by the tribe to take his chance, a stock of food and a supply of the leaves of the mesembryanthemum, a native purgative, being given to him before his desertion. With regard to the surgery of the Tasmanian aboriginals, it was, as might be expected, of a most primitive character. Bleeding was stopped by the application of clay and leaves. Incisions and scarifications were held in much favour in the treatment of various diseases; thus Truganini treated the swollen thigh of her husband by six incisions, which produced slogging, and cured him in nine days; and Robinson relates how a woman, suffering from sick head, breast and belly was incised in each of these parts, the idea in this and similar cases being that the pain was a distinct entity and must be put out. Billandiere, the naturalist of the D'Entrecasteaux expedition, was of the opinion that they used the actual cautery in some diseases; snake bites certainly were treated by a kind of cauterisation, a hole being bored in the flesh near the wound and stuffed with fur, which was then singed. Massage seems to have been occasionally employed, and applications of cold by means of compresses were used for the relief of headache and other pains. As to the diseases which prevailed amongst the aboriginals our knowledge is of the slightest, the early medical men having interested themselves very little in the matter. Before European colonisation they seemed to have been a healthy race. The scientists of D'Entrecasteaux's expedition found but little trace of disease, although there existed among the aboriginals themselves a tradition that their race—at one time much more numerous—was decimated by an epidemic which swept through the island prior to European discovery. After the English colonisation, however, various diseases spread amongst them, syphilis, phthisis, and pneumonia becoming frequent and fatal. Various skin diseases became very prevalent, and were particularly noticed by the early colonists. Thus there are described by various writers:—1. "Scabby sores, affecting the whole body." 2. "Loathsome ulcerated sores, attended sometimes by fatal results." 3. "Leprosy," so offensive as to cause isolation of the sufferer. 4. "Scurvy." 5. "Eruptive disorders, attended by fever." Doubtless, some of these skin diseases were syphilitic, some parasitic. The usual treatment for all skin diseases was the application of ashes, the patient wallowing in them if necessary. Rheumatism was common, and was treated by scarification and incision, sometimes by mutton bird oil. Headaches were treated sometimes by cold compresses, sometimes by scarification, sometimes by charms made of human bones. Thus Backhouse relates how one man had a charm of three bones fixed as a triangle on his head as a cure for headache. The use of such charms, made of the bones of the dead, often of a dead relative or friend, was common, not only as a cure, but also as a preventive against sickness or death. Lung diseases became very common among the Tasmanian natives, and were the chief cause of the final extinction of the race. Inflammation of the lungs was often very rapid and fatal; and phthisis was prevalent, partly because of the alteration of the habits of the race, partly, no doubt, because of the introduction of that disease by Europeans. Some lung troubles were apparently treated by incisions in the chest walls. With regard to nervous diseases, madness and convulsions were known by the aborigines, and were believed by them to be due to an evil spirit; while that peculiar form of melancholia known as nostalgia became a marked feature amongst the survivors of the race interned in Flinders Island, many of whom became the sad victims of that strange disease.

SECTION II. SURGERY.

A special meeting of this section was held on Thursday evening, February 20th, to discuss X-Ray work.

In the absence of the President (Hon. Dr. Butler, M.L.C.), Dr. Drake called on Dr. Crowther to read Dr. Fox's paper.

Dr. K. L. CROWTHER, M.D., M.H.A. (Hobart), said he was pleased to read the paper, and, in doing so, desired to express the thanks of the Hobart Hospital Committee to Drs. Fox and Clendinnen, of Melbourne, for the assistance given by those gentlemen to the committee in the selection of an X-Rays apparatus, the result of which was that the hospital would, in a very short time, be equipped with one of the best X-Ray apparatus in the Southern Hemisphere. He then proceeded to read the paper,—"On Recent Developments in X-Rays Apparatus, and in the Use of Rays," prepared by Dr. W. R. Fox, L.R.C.P., L.R.C.S. (Melbourne). The writer stated that the tremendous impetus given to this branch of physical research by Röntgen's discovery continued to make itself felt. One of the results had been a very great improvement in induction apparatus generally. The different systems of interruption were dealt with, and the comparative advantages of electrolytic interruptors and photography were discussed. It would be readily seen that there were many cases in which the interruptor method possessed advantages over photography. For instance, where much time and trouble had been expended over setting a limb, and where it was imperative that the splints should not be removed, unless good reason were shown—examination by the interruptor method would permit of the bones being seen from every point of view; also, in examination of the heart and lungs. Originally introduced into surgery with the object of locating foreign bodies and the position of fractured bones, X-Rays had extended their usefulness in a very wide manner. At the recent British Congress on Tuberculosis, it was shown that the rays would give evidence of the existence of tubercular disease as soon as, or perhaps before, it manifested itself in other ways. The results of the experiments of Wolfenden and Forbes-Boss on the effects by the rays on micro-organisms were explained, it being proved that the cultures of some micro-organisms exposed to the rays grew luxuriantly. Other tests proved that milk X-Rayed for an hour showed a greater degree of acidification than milk not so treated; cress seed X-Rayed for an hour, and then sown, started germination, and grew much more vigorously than seed not so treated. The experiments on the tubercle bacillus, however, were not satisfactory, the scientists stating their belief that it was impossible to kill growths of bacilli in the lungs, or cocci, by X-Rays. The effects of the rays on the skin were then discussed, the writer expressing the opinion that the destruction of tissues, etc., was due, not strictly to the X-Rays, but to the radiation of some other nature, proceeding from an excited Crookes' tube. Experiments to test the curative value of the rays were detailed. It was hoped that it would exercise some beneficial influence over cancer, but the only effect so far produced was to ease the pain—which it certainly did. The only case of cancer improved by the rays so far was one of carcinoma of the breast, reported by Dr. Andrew Clark in the *British Medical Journal*, Vol. I., 1901, p. 1,368. In this the improvement was most remarkable, and if the beneficial effect continued, it certainly looked as if it should have ended in a cure. In the treatment of rodent ulcer, the rays had proved singularly successful. In all probability the local character

of this disease, as distinguished from other forms of cancer, contributed to this result. In lupus, certain forms of eczema, syphilis, and in one case leprosy of the skin, the treatment of the rays has been successful. In the large suppurating surfaces, left after extensive burns and scalds, the rays would promote rapid healing, and resulted in much less cicatricial deformity. It was possible that they were not aware of the nature of all the radiation emanating from an excited Crookes' tube, but they knew it included:—(1) Anode Rays, which include X-Rays, properly so-called; (2) Cathode Rays, about which not much seemed to be known; (3) Heat Rays, which were more manifest in small tubes than in those of six or seven inches in diameter; (4) Light Rays; (5) Electric Rays, or waves, which manifested their presence in a similar manner to the waves given out by other apparatus generating electricity of extremely high tension. When one, said the writer, considered the above constituents of X-Ray radiation, it ceased to be surprising that its effects were so many and so varied. With regard to rodent ulcer and lupus, he was strongly inclined to think it would be found later that the curative agent in this form of radiation, and in that from the Finzen light, were one and the same thing. Photographs taken by the X-Rays were shown of an injured elbow joint; a diseased neck (atlanto-axoid) of a foetus born dead; of the bullet in Dr. Fraser's head; a compound comminuted fracture of both bones of the fore arm.

RONTGEN RAYS.

Dr. L. H. HARRIS (Sydney Hospital) read a paper on the "Rontgen Rays, with Special Reference to Renal Radiography." (To appear in a future issue.)

EXHIBITION OF X-RAY WORK.

Dr. F. J. CLENDINNEN (Melbourne Hospital) gave an interesting exhibition of Rontgen Ray work. The views exhibited showed the effects of broken and deformed bones, the presence of foreign substances in different parts of the body, and the result of several bullet wounds received by soldiers during the war, concluding with slides showing adulterations of various articles of food, such as flour with chalk, sugar with sand, tea with various substances, etc.

SECTION 5.

PUBLIC HEALTH.

HYGIENE IN AUSTRALIA.

Dr. B. BURNETT HAM, Commissioner of Public Health for Queensland, read a paper on "The spirit of hygiene in Australia." After a brief introduction, Dr. Ham referred to hygiene as it was practised by the ancients, and said that plague, leprosy, cholera, and small-pox, the pestilences of the middle ages, were, like the poor, still with us, but the modern science of bacteriology had invested them with the dignity of the order of "germs." Modern dwellings were still ill-ventilated and overcrowded, public and domestic water supplies were still polluted, food was still adulterated, drains and sewers were still badly constructed, Governments were still apathetic, local authorities indifferent, individuals still careless or ignorant of those simple laws of health and purifying observances practised in the days of Moses. The spirit of sanitation decreed that men should no longer herd in caves; that the individual should no longer pollute the water he drank, contaminate the air he breathed, adulterate the food he ate, or be insensible to the insanitary arrangements of the house in which he dwelt. Selfishness and the struggle for existence had forced the individual, formerly solicitous

only of his own individual health, to recognise in his neighbour a possible source of danger to himself, and and he, therefore, looked to a paternal Government for that protection, which he imagined legislation was able to afford. There was no sanitary reformer like an epidemic of some dread disease, such as plague or small-pox. The recent visitation of plague to the Australian States brought about a great sanitary awakening, both of the authorities and of the more intelligent citizens. Legislation on matters pertaining to the public health must necessarily be progressive, and, therefore, of a piecemeal character. In enacting our statutes sight must never be lost of the fact that the conditions of life, and the environment of the people in Australia were somewhat different to what existed in the old country. However good and wise legislation might be, it was of little service unless it could be backed by equally effective administration. In fact, it was administration rather than legislation which was at default. Since the establishment of the Commonwealth there was a tendency on the part of the State Governments to reserve to themselves many departments which were formerly under the control of the local authorities. To some extent municipal authorities had only themselves to blame if Parliament was unwilling to delegate its powers to them. Until there was a keener interest in municipal affairs no solid advance in sanitation was possible. The Health Act of 1900, of Queensland, cast upon each local authority the responsibility of protecting the public health of its own district. It further provided for hospital accommodation and isolation of infectious diseases, and indicated to local authorities, more especially to those of districts of small or moderate size, the means by which they might advantageously make such provision. Some 20 local authorities within a radius of 12 miles of Brisbane had combined to form what was known as the Metropolitan Joint Board for the Prevention of Infectious Diseases. The board was subsidised by the State to the extent of £1 for £1 on the amount raised by precepts levied on the local authorities represented on the board. It was the duty of the board to deal with all diseases of an infectious and epidemic character. Sanitary administration by local self-governing bodies, as well as administration by a central authority, was nowhere in the Commonwealth better illustrated than in the State of Queensland. In New South Wales there was, practically, no local self-government, the central authority being the administrative and controlling power. It was true that sanitary reform was much more easily carried out, and work requiring skill and money might be better done by the Parliament; but direct taxation of the people without central authority, acting through, or on behalf of, adequate representation, was never likely to become popular with the masses; nor was it a system conducive to that voluntary action of the people which sanitary education should always have in view. Municipal authorities were slow enough to move even when seemingly convinced, but apathy appeared to increase with the square of the distance from the controlling or compelling authority. With the dawn of the Commonwealth the time had arrived when the appointment of a Federal Minister of Public Health might be seriously considered, and the splendid work accomplished by the Sanitary Institute of Great Britain was an incentive to the establishment of a similar institution in the future federal capital. Dr. Ham then detailed what he considered ought to be the objects of such an institution in Australia, and said it was difficult to estimate the influence for good upon the community at large such an institution might ultimately exercise in Australia.

He suggested that the proposed Australian Institute should, if possible, be affiliated or federated with the British Institute. If this could be brought about it would add weight and dignity to the institution. With regard to the outbreak of plague in Australia, the medical men of Brisbane were unanimous in their opinion that true bubonic plague existed in Brisbane. The epizootic among the rats had been somewhat extensive in Brisbane, and large sums of money had been spent in killing off the rodents. "No rats, no plague," was a truism which supplied a remedy as well as a warning, and while all authorities agreed that the relationship between rat plague and human plague was now a well established fact, there were many factors in the rat question which were as yet very imperfectly understood. The practice of classifying plague under many types of the disease was misleading. Plague was plague, whether of the deadly or benign variety. The term "Pestis minor" was misapplied, and should be dropped altogether, except as applying strictly to true plague cases. By far the most promising gain of a of a substantial kind to practical medicine was the improved method of acquaintance with the causation of disease. A fully equipped laboratory, a hospital for clinical cases, and instruction by competent teachers who had made a special study of tropical diseases, would be one of the best efforts in the direction of medical and scientific progress yet attempted in Australia. In conclusion, Dr. Ham referred to the question of food adulteration and food preservatives. All medical and health authorities seemed agreed that the indiscriminate use of preservatives in food was a practice to be greatly condemned. The noblest aims of sanitary science, it had been well said, was the maintenance of the people in the highest state of efficiency to fit them for the labours of peace and the struggles of war, and the success of the federation of Australia would, in the long run, depend on the quality of its citizens, and good citizens could not be reared under unhealthy conditions.

Dr. KENDALL (Sydney) said Dr. Ham's paper was an important one. He complained of the verbose, long-winded, inefficient character of the Health Acts, especially those of Victoria and Tasmania. They contained involved and confusing sentences in numerous sections. Much of this was, no doubt, due to too close attention having been paid in drafting the bills to the Health Acts of England, without sufficient regard being paid to the different interest and requirements of these States. He commended the South Australian Act as a great improvement, though he did not say it was perfect. The latest Public Health Act was the Queensland one. It was so drastically drawn up that when it was put into practice it fizzled out. He felt with Dr. Ham the necessity for showing the people that scientific hygiene was not a fad, but the outcome of the experience and thought of many men, who had studied the sufferings of mankind throughout the ages.

Dr. McDONALD (Sydney) pointed out the reforms that would come with medical officers of health being appointed and paid by a central or State authority, so that he would be independent, both pecuniarily, and with respect to the permanency of his appointment. Such an appointed officer would be able to devote the whole of his time to his duties.

Dr. THOMSON (Brisbane) felt that hygienic education required to be started in the State schools. A resolution from Congress might advantageously go forth on this point. Every public building should be itself an educative centre as to sanitary arrangements. At present many of the schools and other public buildings were lamentably deficient in this respect.

This was as important as the proposal to establish a federal institute of hygiene.

Dr. KENDALL said the sanitary conditions of many public schools are the worst eye-sores we possess.

Dr. LOVEGROVE (Perth) sympathised with what Dr. Thomson had said. Central Boards of Health overshadowed local boards of health; while they continued to do so the latter showed a tendency to remain quiescent. Another reason why local boards of health were wanting in energy and pushfulness, was because they were in the nature of excrescences on municipal councils, instead of being altogether separate and free bodies.

Dr. Ham, in replying, urged that with an improved public opinion on the subject of public health, reforms would be brought about. He moved—"That, in the opinion of this section, the time will shortly arrive when, in the interests both of the sanitary medical service of the various States, and the public of the Commonwealth, the Federal Government, with the assent of the States, should appoint a Minister of Public Health."

In reply to Dr. Thomson, Dr. HAM said that the federal authority could under its constitution take this course, with the consent of the States.

Dr. MACANSH (Victoria) said the feeling was growing that there was altogether too much federation. (Hear, hear.) Instead of interference with the medical officer of health's duties, his experience was that such officers rather got assistance. They were as a rule, carrying out their duties very well, and with much self-sacrifice.

Dr. THOMSON was a strong opponent to federal action. As the Commonwealth Government was going on, it seemed as though it was going to ruin us.

Dr. LOVEGROVE felt it would not be wise to turn all such matters over to the Federal Government.

The motion was negatived on the voices.

Dr. MACANSH moved:—"That, in the opinion of the Congress, steps should be taken by the States of the Commonwealth and New Zealand to unify the Public Health Acts throughout Australasia."

Dr. THOMSON seconded, and the motion was carried.

Dr. HAM moved:—"That, for the purpose of collecting and imparting information upon all matters connected with the subject of public health, a national society be formed, to be styled 'The Sanitary Institute of Australasia.'"

Dr. KENDALL seconded, and the motion was agreed to.

A further discussion ensued as to insanitary closets, etc., at State schools, and that the elements of hygiene should be part of the State school curriculum.

Dr. MASON said that in New Zealand State school children were taught the principles of hygiene, and a text book had been specially prepared for Maori children in their native language.

On the motion of Dr. THOMSON, seconded by Dr. McDONALD, it was resolved:—"That steps should be taken by the Departments of Public Education and other public departments throughout Australasia to make and keep the water supplies, water closets, urinals and other sanitary conveniences of all public buildings, including floor space and ventilation, in such a condition as to be an object lesson to the public. That the elements of hygiene, somewhat after the lines adopted in New Zealand, should form part of the State school curriculum."

Dr. HAM moved:—"That the term 'pestis minor' should not apply to plague cases." Plague was plague, and the term was not desirable.

CORRESPONDENCE.

London.

(FROM OUR OWN CORRESPONDENT).

Prognosis of Phthisis—Death of Professor Von Ziemssen—Vaccination Statistics—Professional Census—Notification of Chicken Pox—Practice in South Africa—Accident to Professor Virchow—Lady Doctors.

INVESTIGATIONS have been undertaken at different times, by various observers, into the occurrence and value of the Diazo re-action in the urine of patients suffering from tuberculosis. A communication made to the November issue of the *Zeitschrift für Tuberkulose* by Blad and Videbeck confirms the results previously recorded by others, and goes to prove that, in a very large proportion of cases, the reaction is negative or inconstant in favourable cases, but positive and well marked in cases which are, from the clinical point of view, bad. Should this observation be established by further experience, the test may prove useful, not only as an aid to prognosis, but also as a means of guidance for the selection of cases best suited to the open air method of treatment in Sanatoria.

By the death of Professor Von Ziemssen, which took place on the 20th January, the University of Munich has lost one of its most distinguished teachers, and the profession of medicine one of its most popular and brilliant members. He was born at Greifswald in 1829, and graduated there in 1854. In 1863 he was appointed Professor of Clinical Medicine at the University of Erlangen, and in 1874 was transferred to the University of Munich, where all the rest of his career was spent. There were few subjects connected with clinical medicine on which, throughout his long and busy life, he did not write; but he is probably most widely known, and will be longest remembered, as the editor of two great medical encyclopædias which have been extensively read, not in Germany only, but over the whole medical world.

At a meeting of the Metropolitan Asylums Board, held on the 11th January, some important information was given in reference to the small-pox epidemic. A special interim report concerning the outbreak in the metropolis during the year 1901 was presented by the Statistical Committee. In this report it was pointed out that small-pox had been practically absent from London during the first five months of the year. The first patient was admitted from Islington on the 29th May, and thereafter single cases occurred from time to time in various parts of London up to the 21st August. From this date and onwards the disease obtained a hold in the parishes of St. Marylebone and St. Pancras. Subsequently cases occurred in every one of the thirty-one poor law parishes and unions comprising the Metropolitan Asylums District. The gross mortality for the year was given at 24.28 per cent.; but this death rate is higher than will appear in the final statistics, because many cases are included in this figure which were of recent admission, whereas contemporary cases, which will nearly all ultimately recover, cannot be included until completed by discharge. The percentage of death in vaccinated cases was 14.21; in doubtful cases, 65.08; in unvaccinated cases, 50.52. Looked at in the light of age periods, the statistics bring out the following figures: Under 10, there were 12 vaccinated cases and no deaths; 6 doubtful cases, all of whom died; and 95 unvaccinated cases, of whom 52 died, a percentage of 54.74. Under 20, there were 161 vaccinated cases,

of whom three died, a percentage of 1.87; 12 doubtful cases, of whom 78 died, a percentage of 58.33, and 151 unvaccinated cases, of whom 79 died, a percentage of 49.07. There seems to be a diminution in the protective power afforded by primary vaccination after the age of 20 years, the death rate rising from 9.85 in vaccinated cases between 20 and 25 years of age to 28.95 in cases between 35 and 40.

Of 2,198 persons employed at the small-pox hospitals between 1884 and 1900 inclusive, in which period 17,900 small-pox cases were received into the hospitals, only 17 persons contracted small-pox, of whom 13 were not revaccinated until after they had joined the ship, and 4 were workmen who had escaped medical observation. During the year there was a large increase of the staff on the ships and at the Gore farm hospital, among whom not one case of small-pox occurred. No member of the staff of the hospital ships has died, or even suffered, from the disease for the past eight years.

These facts confirm the conclusions arrived at by the special committee appointed by the managers to collate statistics after the small-pox epidemic of 1870-1-2. That committee, in their report, dated 11th July, 1872, said:—

"The necessity of re-vaccination, when the protective power of the primary vaccination has to a great extent passed away, cannot be too strongly urged. No greater argument to prove the efficacy of this precaution can be adduced than the fact that out of upwards of 14,800 cases received at the hospitals only four well authenticated cases were treated in which re-vaccination had been properly performed, and these were light attacks. Further conclusive evidence is afforded by the fact that all the nurses and servants of the hospitals, to the number at one time of upwards of 300, who are hourly brought into the most intimate contact with the disease, who constantly breathe its atmosphere, and than whom none can be more exposed to its contagion, have, with but few exceptions, enjoyed complete immunity from its attacks. These exceptions were cases of nurses or servants whose re-vaccination, in the pressure of the epidemic, was overlooked, and who speedily took the disease, and one case was that of a nurse who, having had small-pox previously, was not re-vaccinated, and took the disease a second time."

From the last edition of Churchill's Medical Directory, which was published at the beginning of January, it appears that there is a net increase in the members of the profession for the last year of 434. This is a smaller addition than that recorded for the previous year, when it amounted to 1.98 per cent. on all the names recorded in the Directory, as compared with 1.19 per cent. for 1901. In these days, when the spirit of trades-unionism in the shape of medical aid associations, friendly societies, and other similar organisations, for co-operative provision among the working classes to deal with the exigencies of sickness and death, is becoming such a prominent feature in professional life, and when the struggle for an adequate livelihood is greater, perhaps, than it has ever been before, it is remarkable that there should be this progressive increase in numbers to record. It may not be more than what is commensurate with the growing population of the country; but there is some risk that the labourer, though worthy of his hire, may, in medicine, come to be so poorly rewarded for his toil that the profession comes to lose in some measure its attraction for that large class of desirable young men who, however enthusiastic over the scientific and philanthropic interest which attaches to the work of a doctor, must needs live by the "sweat of their brow."

Pursuant to a resolution of the Council, passed on the 28th January, the London County Council have issued the following order:—

"The London County Council do hereby resolve and order that Section 55 of the Public Health (London) Act, 1891, with respect to the notification of infectious diseases, shall apply in the administrative county of London, for a period of three calendar months, to the disease known as chicken-pox, and the Council do hereby declare that the case is one of urgency, owing to the prevalence of small-pox in London, and the fact that the failure in many cases to distinguish between chicken-pox and small-pox has led, and is leading, to the spread of the latter disease."

It has been decided by the Medical Councils of Cape Colony and of the Transvaal that foreign subjects will not be allowed to practise medicine in those colonies, unless they belong to a country in which the holders of British medical diplomas are accorded similar privileges. This is a wise and reasonable provision, which will not only save South Africa from an inrush of foreign practitioners, but will also standardise the value of the qualifications to practise up to the level of the mother country.

It is only a few months since Professor Virchow celebrated, with great *éclat*, his eightieth birthday, the occasion being taken advantage of to pay the veteran scientist all the honour he so well deserved, and to congratulate him on having reached such a hale and hearty old age. The echoes of these rejoicings in Berlin have scarcely died away when the news comes that Professor Virchow, when alighting the other day from an electric car, fell on the asphalt roadway, and fractured his femur. This unfortunate occurrence has evoked the greatest sympathy among all classes of the German population, as well as among scientific workers all over the world, and it is earnestly to be hoped that the serious consequences which at his advanced age are apt to follow such an accident, may be averted, and that the favourable progress so far recorded may be uninterruptedly continued. According to the *Berliner Klinische Wochenschrift*, the subcutaneous hæmorrhage is rapidly being absorbed, and callus has begun to develop. The organs of circulation and respiration are also said to be normal, but the patient's rest at night is not so good as is desirable.

The difficulties with which female practitioners of medicine and surgery have to contend are considerable. In the practice of their profession among women and children there is probably little doubt that ultimately they may find an extensive and appropriate sphere of usefulness; but public opinion in this country is not yet ripe for their acceptance as suitable exponents of the medical art in all cases indiscriminately. No one denies the right of women to practise. Having worked for and earned her degree or qualification, she is as much entitled to seek the suffrages of the sick as any mere man; but it will probably be long before public confidence establishes her on anything like the sure basis of her brother practitioner, and circumstances must constantly arise where the question of sex becomes a matter of awkward importance, from the point of view both of convenience and of propriety.

This has been strikingly illustrated quite recently at the Macclesfield Infirmary, where the Governors, no doubt because they considered her the best candidate, appointed a lady as junior house surgeon. The medical staff strongly and unanimously objected to this selection, and when they found that their expression of disapproval was resisted by the governing body, they quite properly threatened to resign *en bloc*. As they had from the beginning declined to countenance the appointment of a lady, the action of the Governors in

selecting Miss Clark in face of their unanimous disapproval, left the staff no choice but to resign office, both in fairness to themselves and to the best interests of the infirmary. Fortunately this consummation, which would have been a very disastrous one for all the interests concerned, was at the last moment averted by the resignation of the lady whom the Governors had chosen.

It is very obvious that the domestic circumstances of a small hospital are such as to make it highly undesirable to have the two resident medical officers of opposite sex, and it is equally apparent that, in every general hospital, however small, there must always be a certain number of cases unsuitable for the ministrations of a woman. It is all very well to argue that because men doctors treat indiscriminately all the disorders of women, therefore there is no valid reason why women doctors should not similarly be allowed to deal with all the ailments of men. The cases are not parallel, and nothing is more certain than that were such an argument to be put to the test of experience, patients would seriously object, and in most instances refuse to have many of their ailments enquired into and managed by a lady doctor. The inevitable result would be constant friction, and consequent inefficiency in the service of the hospital towards the patients under its roof. If such unseemly wrangles as this at Macclesfield are to be avoided in future, the medical staff of every hospital must be granted—as it ought to have—a prominent voice in the selection of the resident officers.

Victoria

(FROM OUR OWN CORRESPONDENT.)

The Women's Hospital Dispute—The Melbourne Hospital—Williamstown Lodge Matters—Infant Mortality—Bubonic Plague in Melbourne—Commonwealth Army Medical Service—The A.N.A.—Lodge Abuses.

THE Women's Hospital Committee are now advertising for a Resident Medical Officer, with a salary of £250, to take charge of the midwifery department. So far they have had no response, and Dr. Shields, sen., has been filling the breach in the meantime. There is a great disinclination evinced by any medical men to engage themselves under existing circumstances to the Women's Hospital Committee, and no doubt the junior medical men feel that Drs. Yule and Lewis have a prior claim to any positions that may be vacant, and that they have been badly treated. The general opinion, so far as I can gather from medical men, is that the whole Committee should resign, and a new Committee composed of business men and members of the honorary staff should be appointed, and ladies be left out of the management altogether.

There is a good deal of dissatisfaction amongst the students at the Melbourne Hospital at the high fees they have to pay for clinical instruction, and it is to be hoped that a fair reduction will be soon made. There is also a growing feeling that better accommodation should be provided for the Resident Medical Officers at the Hospital, and that they should be paid for their services.

Payment for medical services is a question that is being discussed in many quarters, and it is felt that our Defence Association might interest itself in bringing to a finality so many honorary positions that should not be honorary. By this I mean appointments to racing clubs, football clubs, bicycle associations, etc., etc. All these amusements should be paid for, and medical attendance should not be gratuitous.

The Williamstown medical men held a meeting on the 12th March, at which it was agreed that the ladies' lodges should be notified that at the end of March their medical fees would be on the same basis as all the other lodges. Dr. Honman intimated that he considered 10s. would be a fair fee to charge the Rechabite lodges for single members, but the proposition was not accepted by the other members, and it was agreed that the rates of pay should remain as they were until complete unanimity was obtained amongst all the medical men. Dr. J. Thomson brought forward the following motion—"That the medical officers of the Williamstown Friendly Societies bring under the notice of the Medical Defence Association the paragraphs in the *Australasian Medical Gazette* of February last, stating that the A.N.A. Board, Sydney, had decided to fix the wage limit for benefit members at £200 per annum, that in their opinion the abuse of medical benefits is most deplorable, and that the Medical Defence Association be requested to take action at once in this matter of wage limit in benefit societies." This was seconded by Dr. Bryant, and carried unanimously.

The infant mortality during the summer months has been very great, and it has been suggested by Coroner Dickson that there should be some public place where infants could be treated in a uniform manner. This is a very wise suggestion, and would be found to answer its purpose admirably, and would be highly appreciated by medical men.

The bubonic plague has at last made its appearance in our midst, in the person of a man living at Fitzroy. He was removed to Coode Island, and every precaution taken to prevent the spread of the disease. Another supposed case was reported from Yarraville, but did not prove to be plague.

The Easter camp has been partially postponed, owing to heavy rains; but if the weather clears up part of the programme is to be gone through. Colonel Williams, the P.M.O., met the medical officers of the Victorian military forces at the Victoria Barracks on the 10th March, and gave a *resumé* of the duties of the medical officers under the Commonwealth *regime*, and it was felt by all present that in Colonel Williams they had a man who knew his work himself, and would see that everyone else should at least have the opportunity of bringing himself up to a proper standard. It was hoped that in future more consideration would be given to the medical department of the forces, which is woefully behind the times in many ways. Colonel Ryan voiced the opinion of all his officers when he stated that in Colonel Williams we had the most suitable officer to occupy the position of head of the medical department of our Commonwealth.

Dr. Worrall's remarks anent the A.N.A. at the Hobart Congress have caused a great amount of discussion in this State, both amongst medical men and the various branches of the A.N.A., and many motions have been passed by the A.N.A. branches, expressing their indignation at the remarks, and their denial of the charges brought by Dr. Worrall against them.

A lodge abuse that has been quite common lately is as follows:—A young man passes the lodge doctor, and within a week the doctor is called in to attend an invalid mother, and by the lodge laws he must attend this chronic case perhaps for months. It is quite time that lodge matters were brought to a better condition for the general practitioner, whose life at present is most unenviable, what with heavy expenses, small fees, and petty annoyances of all sorts from exacting lodge patients.

ANISOMETROPIA.

(To the Editor of the *Australasian Medical Gazette*.)

SIR,—I have to thank Periscopist for his courteous note to my letter. To begin with, I should like to freely acknowledge that on one point, the practice of others, he seems to have proved me partly wrong. When one has recognised what he believes to be a principle, and has put it in practise with success for years, one is apt to assume, as I did without reference, that such names as Periscopist overwhelms me with have recognised and practised it also. I must ask to be acquitted of knowingly suggesting that such men are capable of slipshod work. In this matter, however, I would venture to disagree with part of their practice, and to even prophesy that they will come to change their opinions. The sweeping character of my assertion however, is modified when it is remembered that I referred to anisometropia and not merely to high degrees of anisometropia. Upon his use of this term I hope Periscopist will forgive me for again joining issue with him. Before writing my note I did consult one authority, owing doubtless to a like puzzling thought to that which assailed Periscopist, viz., can my conception, translation or definition of anisometropia be correct? On referring to Landolt (*Refraction and Accommodation of the Eye*) I found the following definition of anisometropia: "The state in which the refraction of the two eyes is unequal. Slight differences between the eyes in the same person are frequently found, and are certainly commoner than absolute equality of the two. But it is not of such trifling inequalities which deserve no special name that we are about to speak. For our purposes anisometropia begins when the difference of refraction between the two eyes exceeds the value of the *minimum interval* prescribed by our notation for the different degrees of refraction. In other words anisometropia exists whenever the two eyes demand in order that each shall possess its maximum of visual acuteness, or in order to present to the observer the same clearness in their ophthalmoscopic images two different numbers of spectacle glasses." The italics are mine. Had your periscopic note given any indication that it referred only to *high* degrees of anisometropia or to exceptional cases my letter had not been written. But it talked of anisometropia, and I am content to abide by Landolt's definition of this. There can be little doubt that it will also be the definition which would naturally occur to those not engaged in special eye work, and that to such members of the profession the suggestion that the correction of each eye in ordinary cases of anisometropia was unusual would come as a species of shock. Dr. Duane, though using anisometropia somewhat ambiguously, and including in his table "for the most part only such cases as showed a difference of refraction of at least 2 D. between the two eyes," evidently does not restrict the word to high degrees of inequality. In fact his table includes one case in which the following correction was given, viz.:—

R. E.—.75 D. qt.

L. E.—1.75 D. oph.

In justice to Periscopist, however, I must acknowledge that some of the text books contain *some* justification for the restricted use of the term claimed to be usual by him.

The practice of ordering spectacles for constant wear exact for one eye, and knowingly inexact for another eye, capable of sight, seems to me difficult of justification. I find, however, as Periscopist says, that most of the text-books recommend it for *high* degrees of anisometropia, though not always for the same reason.

My numerous cases, of all of which I have notes, include amongst them, as Periscopist surmises, high degrees of inequality, and my rule has been for the past sixteen years to endeavour to give each eye its correction. I have been so satisfied with the course, which seemed obvious, and with the result, that it would appear to have made me unconscious of the practice being unusual in cases of high degree.

I should, of course, have referred to the different text-books, etc., before speaking so strongly for others, for I admit that my assertion included all but exceptional cases of high as well as those of low degrees of anisometropia. It has occurred to me that my satisfactory results with these cases have been largely due to the fact that I practically never look for immediate comfort, or immediate good distant vision with the glasses I order; expecting sometimes a considerable amount of discomfort and of reduced distant vision (in hypermetropia) until after a few weeks of constant wear. In younger hypermetropia, indeed, immediate comfort with the spectacles ordered means, almost invariably in my experience, under correction of the spherical error.

I am gratified to learn that Periscopist's practice in general agrees with mine. I have the hope and had the belief that it is not an unusual one amongst my interstate colleagues. I hope that you will not consider the space occupied by this subject has been greater than it deserved.

Yours faithfully,

J. LOCKHARDT GIBSON.

[Dr. Gibson's honourable withdrawal from his untenable position leaves me nothing to say beyond that it is a gratifying proof of my estimate of his fair-mindedness. I should possibly have made it clearer that Duane's paper referred to cases of considerable difference between the two eyes, but it must be remembered that in the limited space allowed one for these notes one has to eliminate every unnecessary word, and seeing that Dr. Gibson had read Dr. Duane's original paper, I naturally supposed he understood that Duane referred almost entirely to cases of considerable difference in refraction. I should like to know Dr. Gibson's practice in one class of case, viz., in aphakia of one eye, the other eye being healthy. Does he give in these full correction of each eye?—PERISCOPIST.]

A SUGGESTED IMPROVEMENT IN CLOVER'S ETHER INHALER.

(To the Editor of the Australasian Medical Gazette.)

SIR.—I suppose that most practitioners who have much use for Clover's inhaler, find that after a time the face piece becomes almost unusable, it gets soft, out of shape, and on its inner surface lined with cracks which become receptacles for excretions, often offensive, from the mouth. On application at wholesale houses, I have not been able to get the face piece replaced, so that meant the purchase of a new inhaler. It occurred to me that a metal face piece, capped with the rubber cap, which can always be procured, would answer very well. The local tinsmith having the old face piece for a pattern made me an excellent substitute, and fixed it to the tubular portion of the inhaler, the edge of the tin face piece needs to be made thicker, by having a rim of wire soldered around it, this prevents the rubber cap from slipping, two bits of adhesive plaster make that doubly sure. The metal tin answers the purpose quite well, perhaps nickel or aluminium would look more finished. The repaired Clover now has a face

piece which will last as long as the apparatus itself, it will not get out of shape, and what is more important it can be thoroughly cleansed after each time it is used, with soap and hot water, or some disinfectant as thought desirable. If you think this suggestion may prove of use, perhaps you will kindly find room for it in the columns of the *Gazette*.

I am, Sir, etc.,

JOHN I. SANGSTER (Senr.)

Koorringa, S. Australia, March 19th, 1902.

SANATORIA FOR CONSUMPTIVES.

(To the Editor of the Australasian Medical Gazette.)

SIR.—I think the Medical Congress is to be congratulated on its rejection of the resolution proposed with regard to the establishment of sanatoria for consumptive patients at distances from all towns and villages with at least an area of 200 acres to each. This well-meant resolution if passed would, I am convinced, have proved most mischievous in retarding the provision of suitable accommodation for phthisical patients. I do not deny that the isolation of these cases on 200-acre blocks at distances from towns and villages would be effectual in the prevention of phthisis, so also would their deportation to an island in the Pacific, a proposal which is scarcely more impracticable. It should be hardly necessary in writing to a medical journal to repeat such truisms as:—That the consumptive is not necessarily a source of infection, or that the danger of infection in or from an institution in which proper regulations for the disposal of sputum, etc., are carried out is practically nil. I could, if necessary, having recently attended the International Congress for the prevention of Tuberculosis, cite overwhelming authority for these propositions, were it justifiable to fill your space with what must surely be familiar to the majority of your readers. The communication of phthisis from the sick to the healthy in private houses, work-shops, hotels, boarding houses, travelling conveyances, etc., is at present owing to the almost universal want of proper precautions in dealing with the sputum, a most serious danger. In dealing with it by the provision of sanatoria and hospitals we are hampered mainly—apart from ignorance as to the existence of infection, an ignorance which is gradually disappearing—in the first place by the fear of the expenditure which might be entailed, and secondly by the popular prejudice against sanatoria and hospitals for consumption as possible centres of infection. The effect of passing this resolution would have been to have strengthened both these obstacles. Proposals for the prevention of tuberculosis on a wide scale to be of use must (1) be of a practical character, utilising as far as possible existing institutions by the addition of suitable accommodation, and (2) must, while pointing out real dangers carefully refrain from encouraging an ignorant fear of sanatoria, for which there is no real foundation. To develop such proposals in detail would, sir, be to trespass too much upon your space. I could hardly do my argument justice within a small compass, and indeed I have already discussed the whole subject recently in an official report, of which I forward you a copy.

I have the honour to be, Sir,

Your obedient servant,

A. JEFFERIS TURNER, M.D. Lond.,
D.P.H. Camb.

Late Representative of the Queensland Government at the International Congress for the Prevention of Tuberculosis held in London in 1901.

MEDICAL DEFENCE MATTERS.

(To the Editor of the Australasian Medical Gazette.)

SIR,—Although there may be a considerable difference of opinion as to the advisability of establishing an Australasian Medical Association yet, I believe, those who are interested in medical politics will readily agree that the federation of all the various State Medical Defence Associations is desirable, and that the sooner it can be accomplished the better. For any great good to result from such a federation it would be necessary, however, to alter the constitution of at least one of the Medical Defence Unions, and that the oldest, viz., the New South Wales. Comparing this union with the younger association of Victoria, we find that the latter is becoming much more vigorous and increasing each year, while the former is doing little else than accumulating funds, though, of course, one must admit that the mere establishment of such a union is enough in many cases to deter people from entering on legal action. If we ask for the reason why the younger society is outrunning the older, we shall find it in the fact that the Victorian society combines with its medical defence work the consideration of any matter affecting the welfare of profession in general. Hence it is able and does deal with such matters as lodge abuses, insufficient remuneration of medical men at inquests, notification of infectious diseases, etc., whereas the New South Wales Medical Union is by its constitution confined to the legal defence of its members only, and is thus purely provincial since nothing it does can have any effect upon men outside New South Wales. The entrance fee, £1 1s. and annual subscription £1 1s. is also double that of the Victorian Association and seeing that it has now a balance of £1,560 to its credit there is surely no need to keep its subscription at the higher figure. A striking illustration of the difference in the working of the two associations is afforded by a recent instance. It will be within the recollection of your readers that last year certain Friendly Societies in Broken Hill combined and advertised for a doctor. The only man in New South Wales who accepted the position was a member of the New South Wales Medical Union, and still is a member. Such a thing would never have occurred in the Victorian Medical Defence Association, as it would have at once notified, not only its members, but the whole of the profession in Victoria, of the condition of matters, and any member so applying would have been summarily dealt with. Fortunately the Broken Hill men by standing together have been able to prevent the continuance of the institute, but the New South Wales Medical Union did little to help it. This instance as well as the fact that medicoes of one of the largest New South Wales towns were not aware till lately that the Australian Natives' Association had been declared a society prejudicial to the best interests of the profession, afford proof enough that there is need in New South Wales of an organisation working on the Victorian lines. Is it too much to hope that the members of the New South Wales Medical Union will so alter its constitution as to become a more active body, and worthily representative of the unity with which the Sydney men have held together, as shown by their opposition to the Australian Natives' Association, the Clerk and Warehousemen's Association, etc.

The South Australian Medical Defence Association is to be congratulated upon passing a resolution disapproving of its members giving their services to racing clubs in an honorary capacity, and it is to be hoped that the

Victorian societies will do the same, for there is nothing whatever to justify the continuation of the practice. In this connection, however, one is sorry to see in the report of the recently formed Queensland Medical Defence Association that an honorary solicitor had been appointed and had drafted out the rules and constitution of the association. May one, in a kindly spirit, suggest to the Queenslanders that their action is somewhat inconsistent with the South Australian resolution, and that they should pay their lawyer and not accept his services gratuitously.

We all hope our Queensland brethren will be able to successfully boycott the Brisbane Medical Institute. In this connection, may one draw attention to the recent decision of the General Medical Council of Great Britain, as reported in the *British Medical Journal* of December 7th, 1901, in the case of Dr. Randell. The action of the Council is surely the most hopeful sign that the general practitioner has been able to see amidst the gloom cast round him by lodge work, and should encourage all medical reformers not to be faint-hearted. There is no doubt whatever that Friendly Societies canvass, but it is done so indirectly that it is difficult to prove. If newly qualified medicoes can be kept from accepting these lodge appointments, only half the applications would be received. Years ago I suggested the method advocated in your leading article, viz., special lectures on medical politics to fifth-year students, to bring matters prominently under the notice of recent Melbourne graduates. I, at the request of one of the Melbourne Hospital staff, wrote an article dealing with the subject for the Melbourne medical students' journal, *The Speculum*. Cannot more of our men do likewise?

Yours, etc.,

ABOU BEN ADHEM.

(To the Editor of the Australasian Medical Gazette.)

SIR,—Contemplating the position of the contract practitioner in New South Wales after two years' absence from the State, and having carefully read the correspondence, notes, etc., in your issues during that interval, I beg to draw your readers' attention to page 53 of the report of the Brisbane Intercolonial Medical Conference, held in September, 1899. It will be seen that on September 20th, 1899, I suggested that the members of our profession "should form an association to supervise all contracts between medical men and friendly societies, and to improve the conditions under which such practitioners laboured. He moved that they should recommend the formation of such a Society, because he believed its disciplinary powers would be of benefit, and its advisory powers equally great." I believe that in formulating that motion I used the word "contract" very markedly, as I wished to bring insurance companies and hospitals into the scope of the resolution. A later speaker made a demur at this word, and I, with permission, altered my proposal, naming an "Australian Medical Practitioners Association for the purpose of supervising and controlling the practice with regard to benefit societies and similar institutions." Dr. Worrall moved as an amendment that the defence associations should take up the matter, and proposed the names of six gentlemen "to press forward the desire of the Congress in this important matter." I withdrew my motion, and seconded Dr. Worrall's. His motion was unanimously carried. The last entry in the report of the meeting is "The proceedings then terminated." Can you inform me if, at the Hobart Conference or elsewhere, a report has been made by the six gentlemen referred to?

I can see so slight a difference in our position after two and a half years lapse of time that I again venture to suggest the formation of a new and special organization. The chief difficulty under which we now labour is lack of mutual aid. If Dr. A. resigns a Lodge to-day, to-morrow Dr. B. offers himself. If Drs. A. and B. will join such an association, A's articles would prevent Dr. B.'s action when opportunity arose from Dr. A.'s action. The essence of mutuality in such cases is some common bond other than that which is now regarded as nominal—a professional kinship. I am more than ever convinced that not only union, but the discipline of volunteers, is required. A rule that none should offer their services except with the consent of the Council, or to bodies already approved of by the Council, would make such a society real. Items of detail I am prepared to add, but not to this letter, which is already too long. As Dr. Syme said at the meeting to which I referred above, the other Societies have their special work. Therefore I think something new is required. The British Medical Association has its scientific work, Defence Unions their special work, and so on.

Some practices have made an improvement—but only a small number—after many years. Let our profession try to get all into line that individuals will have the advice and support of a centre. By such means only will, I believe, we all be freed in this connexion from and away from distrust of the profession or any individual member thereof.

I am, etc.,

GERALD S. SAMUELSON.

Armidale, March 19th, 1902.

THE TREATMENT OF MIDDLE EAR SUPPURATION.

(To the Editor of the Australasian Medical Gazette.)

SIR,—I desire to offer a few remarks on Dr. Arthur's paper on "The Treatment of Middle Ear Suppuration," which appears in your issue of March 20th. With most of his conclusions I agree, but some I think, cannot be allowed to pass without criticism. Where he makes Macewen, of Glasgow, say that "he would rather have a charge of dynamite in his ear than a drop of pus," I would point out that Professor Macewen, whom I may venture to call my friend, having been so kindly received by him when I, six years ago, had the privilege of attending his Clinic in Glasgow, does not express any personal preference of this sort. Macewen, in his classic work, "Pyogenic Diseases of the Brain, etc.," says: "Where the tympanic cavity has become the seat of chronic suppuration, with ulceration of the mucous membrane extending into the antrum and mastoid cells, it becomes a standing menace to the safety of the patient. A person might as well have a charge of dynamite in the mastoid antrum and cells, as one cannot know the moment when accidental circumstances may arise, which may cause the infectious matter to become widely disseminated all over the cerebro-spinal system." The italics in the passage quoted are mine. They emphasise the cases in which surgical treatment of the mastoid, according to Macewen, becomes necessary. "The indications for opening the mastoid antrum" are clearly stated later on in his work. Regarding the radical operation, Dr. Arthur says before he would allow it to be performed on himself he would like to know—

1. The dangers of the operation and the anæsthetic.
2. The danger to my facial nerve and what hearing power I had left.

3. The chances of the discharge continuing even after the operation.

I would say to No. 1. The dangers of the operation, when skilfully performed, are small; of the anæsthetic, not more than in other operations—less probably than that for tooth extraction.

To No. 2. In sixteen years experience of mastoid operations in private and hospital practice, during six of which I have, when necessary, done the radical operation, I have not had one case of permanent paralysis of the facial nerve. The hearing power is more likely to be improved than injured when a middle ear, filled with granulations and pus, is converted into a clean cavity.

To No. 3 I would say that I have many cases of complete success by the radical operation, which could be attained by no other means.

I agree with Dr. Arthur that operative measures are only exceptionally required, but not with his pessimistic statement that "a chronic otitis will exhaust all our remedies and patience." I find that cases which have existed for years will generally yield to local treatment—particularly when diseased granulation and polypoid tissues are removed. The exceptional cases may include some which require radical operative treatment. In fact, I regard the treatment of middle ear suppuration—acute and chronic—as the most brilliant field of the aural surgeon, if we except the fine results which follow the removal of a plug of impacted cerumen.

I do not hold with the view that operations on the mastoid should be postponed till dangerous symptoms supervene. This means that a mastoid suppuration may have extended to a sinus thrombosis, a cerebral, or cerebellar abscess. Like Dr. Arthur, I do not operate because there is pus in the middle ear, which it may be impossible to stop by local treatment, that is, so long as the condition is quiescent. I operate when I believe the patient's life is endangered by delay, but I go further, and comply with the wish of many, and endeavour to cure a condition, which makes life a misery, by operative measures, when other treatment, after sufficient trial, has failed.

Against the method mentioned by Dr. Arthur of some American surgeons of filling the auditory canal with carbolic acid, I would warn the profession. I have no experience of it, nor am I likely to have. The result would be a probable necrosis of the epidermis of the auditory canal, and of what remained of the membr. tympani. If I have thought it necessary to make these remarks on the able and thoughtful paper of my colleague, Dr. Arthur, it does not follow that I do not agree in the main with most of his conclusions.

I am, Sir,

Yours obediently,

A. J. BRADY.

Hon. Surgeon, Department for Diseases of the Ear, Nose, and Throat, Sydney Hospital.

3 Lyons' Terrace, Sydney,
March 24th, 1902.

According to a recent consular report, Dr. Ekenberg, of Gothenberg, has worked out a method of reducing milk to the form of powder, which will be of far-reaching importance to the business of dairy farming. It is said that the product possesses all the qualities of milk in concentrated form, except that moisture is absent, and that it will not get sour or ferment. The milk flour is completely soluble in water, and can easily be transported in tins, barrels, or bags.

REVIEW OF CURRENT MEDICAL LITERATURE.

GYNÆCOLOGY AND OBSTETRICS.

Curetting Patients attending the Out-patient Department.

Bookosmakavo (*Vratak*, 1901, No. 39) says that in the year 1901, 5,593 patients attended his out-patient room, and curetting was performed 154 times. In 116 cases it was for fungous endometritis, and endometritis following upon abortion; in 35 for recent abortion; and in 3 for diagnostic purposes. The endometritis was completely cured in 116 cases; in 14 cases some metrorrhagia remained, which was cured by the injection of a solution of iodine (grammatiki solution). The presence of salpingo-oöphoritis when the tubes were not thicker than a finger and ovaries not larger than a pigeon's egg, was not accepted as a contra-indication against curetting. In 2 cases, after curetting for abortion, the hæmorrhage recurred, but a second curetting put everything right. The abortions were operated upon immediately, but the cases of endometritis were prepared for the next day, a piece of iodoform gauze being introduced for twenty-four hours. In half the cases Hegar's dilators, up to sizes 9 and 10, were introduced to enable the curette to be used. Every possible antiseptic precaution was taken. The iodoform gauze was not passed into the uterus, except in inflammatory cases for purposes of drainage. The patients, after curetting, were kept on a couch for three to four hours, and a bladder of ice placed upon the abdomen. They were driven home, and went to bed for four days, when they returned to the clinic. The results were so good that the author has continued his practice, and has done several dozens already this year.

Gonorrhœa.

T. W. Eden (*Clinical Journal*, September 18th, 1901) uses a 1 in 1,000 solution of bi-chloride or biniodide of mercury thoroughly applied to the vaginal mucous membrane. This solution must be applied uncer an anæsthetic and by means of a stiff brush. This treatment must be carried out early, that is, before the Bartholinian glands are involved. When the disease involves the urethra, this must be dilated and the canal swabbed out with a 1 in 2000 perchloridesolution. When the above treatment is refused, the best method of treatment is by pessaries of cocoa butter containing twenty grains of iodoform and ten grains of oil of eucalyptus. A pessary is passed into the vagina when the patient goes to bed; it melts, and the solution flows over the vaginal walls and into the folds and depressions. Douches are used in addition to the above. A douche should always be given with the patient in the dorsal position.

Hæmaturia due to Uterine Fibroids.

H. Hartmann (*Annals de Gynécologie et d'Obstetric*, September, 1901) calls attention to the possibility of a fibroid of the uterus simulating a tumour of the bladder. His patient had had persistent hæmaturia for six weeks, and examination of the bladder showed a tumour projecting from its posterior wall. Supra-public section proved that the tumour was a fibroid projecting from the supra-vaginal portion of the cervix, and merely pushing in the posterior wall of the bladder, which was red and granular at that point. Recovery followed curettage and canterisation of the granulations.

Pessaries.

George W. Kaan (*Annals of Gynecology and Pediatrics*, December, 1901) advocates the pessary in cases in which the displacement is capable of replacement or can be made so by treatment, and in which the pessary is capable of holding it in place and can be worn with comfort. The case must be watched with particular care and the pessary removed with the onset of the slightest pain. The ability to do without the pessary within a year or so occurs in about 25 or 30 per cent. of the cases. Ordinarily the error is made of choosing too large a pessary. Kaan makes a plea for the more careful treatment of displacements by suitable applications and by pessaries before resorting to operative measures, which are by no means uniformly successful in their results.

Uterine Displacements.

Henry C. Coe (*New York Medical Journal*, November 9th, 1901) offers the following deductions:—Muscular atony is an important factor in the causation of uterine displacements, either alone or associated with the usual factors, overweight of the uterus and weakening of its ligaments and the pelvic floor. Mere restoration of the organ to its normal position with regard to the axes of the pelvis is not sufficient to cause permanent relief of symptoms, provided additional support is not afforded by firm pelvic and abdominal muscles. The prognosis as to the cure of malpositions by operations is influenced by the general muscular tone of the individual. Hence it should be the aim of the physician to endeavour to restore such a healthy condition of the muscles, either before or after operation, by appropriate treatment—baths, massage, electricity, gymnastic movements, out-of-door exercise, tonics, and such regulation of the patient's dress and mode of life as seems best fitted to the individual case. In short, the work of the physician often begins where that of the surgeon ends, if the result is to be complete and permanent.

Retention of the Menses.

Christopher Martin (*British Gynecological Journal*, November, 1901), contributes a paper on this subject, and reports twelve cases. In two cases the atresia was at the hymen, in four in the vagina, and in six in the cervix. In one case there was a bicornate uterus, in two cases the uterus was double, and in two cases both the uterus and vagina were double. In three cases the retention cyst consisted of the vagina alone, in three of the uterus alone. The uterus and tubes were distended in six. The retained fluid was blood in seven cases, pus in three, and blood in the uterus with pus in the tubes in two cases. In discussing treatment he says: The cases vary so much that no one line of treatment can be laid down as applicable to all cases; but there are certain general principles which should guide us. (a) Whenever it is possible, the collection should be opened and drained *per vaginam*. The vulva and vaginal cul-de-sac must be rendered aseptic, and a free horizontal incision made in the roof of the cul-de-sac, and carefully deepened by dissecting up between the bladder and the rectum (if they be in contact). When the wall of the retention cyst is reached a free transverse incision should be made into it, and the viscid treacly fluid washed away by prolonged irrigation. If it be possible the mucous membrane of the sac should be drawn down and sutured to that of the vaginal cul-de-sac, and the cavity packed with iodoform gauze. (b) Should the Fallopian tubes be felt distended on either side of the uterus, an abdominal

section should at once be performed, and the tubes emptied of their contents by free incision. Should they contain pus they ought to be removed. (c) In those cases where it is impossible or dangerous to reach the retention cyst from the vagina, the abdomen must be opened and the uterus and tubes extirpated. (d) Where there is a septate condition of the uterus or a double vagina, the septum should be divided as far as possible and the two cavities thrown into one. (e) In many cases where an artificial opening is made, especially in the cervix, there is a marked tendency for it to reclose by cicatricial contraction. This must be prevented by the regular passage of bougies, or by the wearing for months or years of a flanged rubber or vulcanite tube. (f) In all these operations there is a great danger of septic infection, and therefore the most scrupulous antiseptic precautions, not only in the operation, but during the after treatment, are of vital importance.

OBSTETRICS.

Unusual Perineal Rupture in a Primipara.

Erwin Kehr, of Bonn (*Cent. für Gynäk.*, No. 36, 1901) describes the case of a primipara (age not stated) who was delivered in the obstetric ward of the hospital. The presentation was L.O.A. The vagina was very narrow and rigid; it presented numerous wart-like elevations and a muco-purulent discharge, but no gonococci were found. Twenty-two hours after the pains began the anus was observed to be widely dilated, but retained its round contour, and presenting through it was seen the nose and upper lip of the foetus, and later the mouth and hair on the forehead, whilst the occiput presented at the vulva. The perineum was thinner in the middle, and a typical central rupture was expected, but it tore at its two extremities, in spite of all efforts to keep the head back. When all hope of saving the perineal floor was lost, it was cut through centrally with scissors. The lower third of the posterior vaginal wall was torn, the rectovaginal septum was torn, and the rectum only in its postero-lateral walls remained attached to the sphincter. The split anterior rectal wall was drawn up to a great distance from the sphincter, which, until the perineum ruptured, was intact. The vaginal wall was sewn up with catgut, the perineum with silkworm sutures, and the last two stitches passed through the sphincter and then through the retracted rectal wall on the one side, and again through the rectal wall and sphincter on the other side of the tear. This closed the sphincter, and at the same time brought down the retracted bowel by a kind of purse-string suture. A rubber tube, wrapped in gauze, was inserted through the repaired sphincter. The healing of the wound was complete; there was no rise of temperature. The bowels were opened on the tenth day, sutures removed on the eleventh day, and an enema given. The patient was discharged from the hospital on the twenty-first day, and the sphincter action, both for feces and flatus, was completely restored.

Hæmaturia of Pregnancy.

Chiaventone (*Ann. de Gyn. et d'Obstet.*, September, 1901) defines this complication as "a hæmaturia without hereditary or individual pathological antecedents, which supervenes during pregnancy, and passes off with its termination, which is marked by the absence of ordinary lesions, and is entirely and exclusively brought about by pregnancy." Albarran had collected twelve cases of hæmaturia during pregnancy, but in five of these, as Chiaventone shows, the hæmorrhage was due to pathological conditions other than pregnancy, viz., hæmophilia, nephritis, cystic tuberculous

kidney, and chyluria, followed by hæmaturia of probably parasitic origin. These five cases are instances of hæmaturia during pregnancy. The remaining seven are admitted by the author as genuine cases of hæmaturia of pregnancy, and he adds a note of a personal case, making eight cases recorded in all. As a working hypothesis of the cause of this condition the author suggests that it may be due to a gravid toxæmia, brought about by hepato-renal insufficiency. Prognosis is not unfavourable. Treatment is expectant, for ordinary styptics appear to be of little value. If the loss of blood is grave, the membranes should be punctured or labour induced. An excellent resumé of published cases is appended to the paper.

Congenital Diaphragmatic Hernia.

Porak and G. Duranti (*Comptes-Rend. de la Soc. d'Obst. de Paris*, May, 1901) describe a case in which the child did not breathe and rapidly became cyanotic. The presence of the apex beat in the right mammary line suggested transposition of the viscera, but intestinal tympany over the whole left half of the thorax showed the presence of a diaphragmatic hernia. Autopsy demonstrated the situation in the left pleural cavity of the left lobe of the liver, the stomach, duodenum, ascending and descending colon, spleen, pancreas and the entire small intestine.

The Influence of Pregnancy and Childbed on Phthisis.

Bernheim (*Annals of Gyn. and Paed.*, June, 1901). in an article on the above subject, comes to the following conclusions:—

In those predisposed to such infection pregnancy does not necessarily lead to phthisis, but is the more likely to do so the younger the subject may be. Latent or ancient tuberculosis is not necessarily aroused by a single pregnancy. Where ultimate infection is to be feared marriage should be delayed; in case of past tuberculosis, prognosis as to the results of maternity must be reserved.

The more extensive the tubercular lesions the greater the danger of pregnancy; in miliary tuberculosis it is almost certainly fatal.

A single pregnancy may not aggravate dormant tuberculosis; repeated pregnancies are almost always disastrous, even in the curable forms of phthisis.

Childbed and convalescence are particularly trying to the phthisical; lactation should be prohibited.

If existing tuberculosis be aggravated from the first weeks of pregnancy, induced abortion, with due precautions, is justifiable. The influence of paternal tuberculosis on pregnancy is nil.

Young Primiparæ.

H. Paunetier (*Paris, Thesis*.) has collected 281 cases of labour in women below the age of 17, at the Tarnier Clinic. His statistics go to prove that labour is not unusually hazardous for very young women. Pregnancy usually reached term. There were no abnormal presentations. The average duration of labour was only fourteen hours and nine minutes. Forceps were employed in 16 cases.

At the meeting of the executive committee of the Queen Victoria Home for Consumptives on April 9th, Dr. Purser, hon. secretary, stated that he had advertised for a resident medical officer for the new sanatorium at Wentworth Falls in the various medical journals in Australia and throughout the United Kingdom. The salary for the position was £300 per annum, with board and residence. Of the 24 applications received, none were from Australia. They were as follows:—Great Britain 15, Germany 4, United States of America 4, and Fiji 1.

NEUROLOGY.

The Supra-Orbital Reflex.

Prof. V. Bechterew (*Neurologisches Centralblatt*, No. 20) has investigated the reflexes to be elicited in the region of the face. Beside the conjunctival and the pharyngeal, he mentions four others which are present with greater or less frequency. The "Eye Reflex" is demonstrated by striking with a percussion hammer on any part of the fronto-temporal portion of the skull or on the malar bone. The result produced is a slight contraction of the orbicularis oculi. He finds the reflex present in the majority of the cases investigated. Since the reflex arc consists of the trigeminus, its sensory nucleus, and the upper branch of the facial, the reflex should be of interest in lesions of the brain-stem, and the parts of the brain lying above it. Q. McCarthy (*Neurologisches Centralblatt*, No. 17) considered that this reflex, which he named the "Supra-Orbital," was only elicited by direct percussion over the position of the supra-orbital nerve. Bechterew now points out that the area of excitability is much larger. Another writer (Carl Hudovering) holds that it is not a true reflex at all, since he found it intact after removal of the gasserian ganglion, in a case in which complete hemi-anesthesia and hemianalgnesia of the face resulted from the operation.

Tabes Dorsalis and General Paralysis.

A very interesting discussion on the unity of the pathological process in these two diseases took place at the Pathological Society of London (*Transactions* vol. 51). Mott expressed his well-known opinion that both diseases were due to a primary degeneration of the neurone due to a poison, most probably that of syphilis; in the case of tabes it is the endogenous spinal neurones which are affected, while in general paralysis the stress falls on the association system of neurones of the cerebral hemispheres, especially on those of the frontal and central convolutions. He said, "A striking instance of the selective action of the syphilitic poison is shown in the fact that only in persons affected with acquired or inherited syphilis is the symptom known as the Argyll-Robertson pupil found, indeed it is sometimes the only symptom. Seeing that this is the most common objective phenomenon in the two diseases mentioned, it strengthens the presumption, based on experience, that the syphilitic poison is the cause of the disease in the majority of instances." Among his reasons for considering the diseases identical were the following facts: (1) a certain number of cases of tabes present mental symptoms; (2) a certain number of cases of general paralysis present tabetic symptoms, and after death atrophy and sclerosis of the posterior column are frequently found in these cases; (3) a certain number of cases of tabes develop subsequently mental symptoms, and die of general paralysis. It had been contended, he said, that the degeneration of the posterior column in general paralysis was endogenous and not exogenous; his own observations led to quite the contrary conclusion. He had further observed that characteristic tabetic symptoms such as grey atrophy of the discs were not uncommon in general paralysis, and he had even met with symmetrical perforating ulcers and Charcot's disease of the joints. The meeting was almost unanimous in considering syphilis as the chief if not the only cause of both diseases. Alex. Bruce combatted the idea of a primary neurone degeneration, but Mott was supported by such men as Gowers, Ferrier, Buzzard, Head, etc.

Physiology and Pathology of Muscular Tone, of Reflexes, and of Contractions.

At the recent Congress of French Alienists and Neurologists (*Archives de Neurologie*, No. 70), M. Crocq read an interesting paper on the above subject, which he treated by the methods of comparative neurology. He gives the condition of muscular tone, the reflexes, etc., as found in the rabbit, the dog, the monkey, and man, under various normal and pathological conditions. As regards *muscle tone* in man, he finds that a complete transverse lesion of the cord in the cervical or upper dorsal region produces total and permanent abolition of the tone of voluntary muscles and exaggeration of tone in the sphincters. From this he concludes that in man the long conducting paths are alone charged with transmitting the impulses regulating the tone of the voluntary muscles, and that the centre for this tone is exclusively cortical. The tone of the sphincters is regulated by means of the short paths, but cortical influence is more marked in man than in the other animals. In the new-born the pyramidal tracks are not functionally present, and in them, as in the lower animals, voluntary muscular tone is regulated by the short paths. Concerning the *reflexes*, he points out that section of the posterior roots produces the abolition of all reflexes; that in man complete section of the cord in the cervical or upper dorsal region produces permanent and entire abolition of tendon and cutaneous reflexes; that destructive lesions of the cortex cerebri cause in all animals an exaggeration, more or less marked, of tendon reflexes, and in some animals a diminution of cutaneous reflexes; that destructive lesions of the cerebellum produce an exaggeration of tendon reflexes. His conclusions are that in man the centres for tendon reflexes are basilar, and are subject to the inhibitory action of the cerebrum and of the cerebellum, and that the centres for cutaneous reflexes are cortical. In this connection, he pointed out how common it is to find clinically a disagreement between the tendon and cutaneous reflexes, and further showed that, if his suppositions were correct, such disagreement would be of high diagnostic value. *Contractions*, he pointed out, was indissolubly bound up with muscle tone, it being the expression of hypertonicity; irritative lesions of the cortex cause in man and the monkey (as opposed to other animals in which muscular tone is maintained irrespective of the cortex) marked contractions, since with them the tonus mechanism involves the cerebral cortex. True muscular contraction is produced on the one hand by alterations in the central motor neurones, and on the other by the laws of muscular antagonism.

Intra-spinal Injection of Cocaine.

Pitres and Abodie, of Bordeaux (*Archives de Neurologie*, No. 70) write on the physiological effects of intra-spinal injection of cocaine. The most important of these effects is analgesia of the lower limbs, and we have thus an elegant method of producing surgical anaesthesia, and of relieving painful crises, such as those of tabes. Their conclusions are drawn from observations on about fifty cases. In each case they injected 5 to 2 c.c. of a 2 per cent. sol. cocaine. They consider the effects are due, not to a direct action on the cord, as maintained by other writers, but to an alteration in the conductivity of the posterior roots. The analgesia comes on gradually and in patches. These patches spread, and become continuous. The analgesia is preceded naturally by a condition of hypoaesthesia. Sensibility to pain disappears first, next that for temperature, and, lastly, that for pressure is lost.

When the effect is complete the patient is unable to distinguish differences in pressure amounting to several kilogrammes—only experiencing a sensation of contact. The sensibility of the deeper parts disappears *pari passu* with that of the skin. When the action of the drug is being fully exerted, energetic pressure of the muscles, severe blows on the bones, and even almost brutal traction on the joints, produce no sensation of pain. The cocaine has no effect on the deep visceral sensibility (testicular, epigastric). The cutaneous reflexes are, as a rule, abolished; the tendon reflexes are exaggerated; the sphincters are unaffected; in a few cases slight turgescence of the genitals was observed; in some cases profuse sweating of the upper parts of the body, but no secretory or vaso-motor troubles in the analgesic areas. In about two-thirds of the cases a trembling of the limbs was observed; it was usually slight, but occasionally intense and persistent; it had no direct relation to the exaggerated tendon reflexes. The power of movement was not lost—the patients being able to walk—but they complained that the limbs felt heavy. Bomberg's sign was not present in any of the cases. An intense feeling of nausea often supervenes. The writers assert that the headache which this procedure is said to cause is not due to the cocaine, since it occurs after simple lumbar puncture, with the removal of a few cubic centimetres of cerebro-spinal fluid.

OPHTHALMOLOGY.

Testing for Colour Blindness.

In the *Ophthalmic Review* for February, Dr. Edridge Green, who is widely known for his special study of the subject, contributes an article on the requirements of a test for colour blindness. He gives reasons for objecting to the Young-Helmholtz theory of colour vision, and criticises the Holmgren test, showing that by it, no less than six varieties of colour blindness may escape detection, while a very large percentage of normal-sighted persons are rejected by it, no less than 38 per cent. in one year, and 42 per cent. in another, having been shown to have been wrongly rejected by the Board of Trade by this test. He contends that in a test for colour blindness, colour names should be used, arguing that ignorance of the colour names of red, yellow, green, and blue, is as fatal as colour blindness. He tests by means of a lantern, in a dark room, at a distance of at least fifteen feet, with slides of red, and green, blue, purple, and yellow, which can be "fogged" by placing before them slides of ground or ribbed neutral glass. The purple, blue, yellow and green slides are necessary to prevent guessing. With this test, though persons with colour sense sufficient for every practical test do not fail, colour-blind persons make one or more of the following mistakes, viz., calling red "green," or green "red," or white "red" or "green," or *vice versa*; or red, green or white light "black." One incorrect answer suffices for rejection. The candidate may be convinced of his defect (of which he may have been really unconscious) by removing the "fogging" glass, and allowing him to come closer to the lantern when he will, often to his utter amazement, recognise his incapacity.

The Pathology of Optic Neuritis in cases of Cerebral Tumour.

In the *Archives d'Ophthalmologie*, Sourdille, of Nantes, contributes an article on this subject. He describes three cases, clinically, anatomically, and pathologically. He traverses the three theories most

in favour at the present time, viz., those of Schmidt-Rimpler, and Manz, Leber and Deutschmann, and Parinaud. According to Sourdille, the fundamental change is oedema of the optic nerve, spreading downwards from the proximal end, and producing its maximum effect at the level of the optic foramen. His explanation is briefly as follows: The chiasma is, anatomically, an appendage of the third ventricle, with which it is closely incorporated. The whole of the perivascular, and intravascular neuroglia of the optic nerve is in direct continuity with that of the chiasma, and ventricle. Oedema of the wall of the third ventricle, leads to oedema of the chiasma, which descends, along both optic nerves. As the nerve swells from oedema it is compressed in the optic foramen, and the strangulation can be easily demonstrated in fresh specimens. As a result of the compression the venous return in the optic nerve, and also the lymphatic circulation is impeded. The interstitial oedema of the nerve is thus increased at the same time, and the pial veins are dilated, and allow a serous exudation into the sub-arachnoid space. This fluid cannot flow back to the brain, because the swollen nerve completely fills the bony foramen, and prevents its return. The sheath becomes distended, giving rise to the classical ampullary dilatation. (In this process, pressure of the cerebral spinal fluid plays no part). The circulation in the central artery and vein is obstructed; but, the obstruction being gradual, the capillary network in the lamina cribrosa becomes dilated, and the circulation is carried on collaterally with the vessels of the choroid and scleral ring. Vision and retinal circulation are thus preserved, but the swelling of the papilla is the clinical expression of the collateral circulation, which takes the place of that of the central vein. There is no essential difference between descending neuritis, and choked disc. Atrophic processes start at the optic foramen, and are due to strangulation of the nerve in the bony canal. The atrophy extends up to the chiasma, and down to the disc. The motor and sensory functions of the nerves of the limbs are preserved for a very long time in spite of considerable oedema, but they have not the same anatomical cause for compression and strangulation as the optic nerve has.

The Treatment of Chronic Glaucoma is a question that continues to excite interesting discussion amongst ophthalmologists. The subject was again thrashed out at the recent meeting of the Ophthalmological Society of the United Kingdom, and also in the Ophthalmic Section of the New York Academy of Medicine. There was a general agreement that early inditing is the proper treatment, but it should be done before the sight is much affected, or the field greatly contracted, especially the field for colours. A *sine qua non* is the existence of increased tension with narrowed angle of the anterior chamber. In advanced cases with great contraction of the field, marked impairment of vision, decided plus tension, and deep cupping of the disc, operation was considered to be contra-indicated, and said to be often followed by immediate further impairment or loss of vision. Anterior or posterior sclerotomy was not viewed with much favor save in certain exceptional circumstances. Differences of opinion existed as to the necessity for the iridectomy being a large one, and also as to the propriety of trying to secure a cystoid cicatrix by leaving the iris or a portion of it incarcerated in the wound. The majority of the speakers favoured the careful clearing of the iris from the angles of the wound. Excision of the superior cervical ganglion of the sympathetic was referred to, but was generally regarded with great suspicion.

OBITUARY.

Allan James Campbell, M.B., B.S., Adelaide.
 Dr. A. Campbell M.B., Ch.B., M.R.C.S., eldest son of the late Hon. Dr. A. Campbell, M.L.C., died in Pretoria of enteric fever on March 19. Deceased was educated at St. Peter's College, and graduated M.B. and Ch.B., at Adelaide University in 1896. For some time he was house surgeon at the Adelaide Hospital, and afterwards at the Children's Hospital. Some years ago he went to England with a view of taking the F.R.C.S. degree. He obtained his M.R.C.S., and the war breaking out he went on one of the hospital ships. He was surgeon in charge of the military hospital at Harrismith for some time, and subsequently went to Pretoria, and while there contracted the disease to which he succumbed. Deceased married (on May 14, 1901) Miss K. Durrant, a daughter of the late Major-General Durrant, and neice of Lord Roberts.

Robert Denham Pinnock, M.D., C.M. Glas., Ballarat, Victoria.

We regret to read the sudden death of Dr. Pinnock, the well-known practitioner of Ballarat. Dr. Pinnock was born at Hawthorn, Melbourne, in 1849, and was the son of Mr. J. D. Pinnock, a well-known public man in the early days of the State. He received his primary education at a school in East Melbourne, and in 1873 he graduated bachelor in medicine and surgery at the Glasgow University, from which he subsequently received the degree of doctor of medicine. On returning to the State he practised for a time at Beaufort, and finally settled in Ballarat in 1869, where he soon established a very lucrative practice. He took a prominent part in public affairs, and for many years held a commission in the local military forces. He was a member of the honorary staff at the Ballarat Hospital. He left Ballarat in apparently the best of health and spirits on Monday, for a shooting excursion at Nerrin Nerrin Station, Streatham, when his demise occurred. He had just shot a hare, and was reloading his gun, when he fell forward and expired. The remains of Dr. Pinnock were interred in the family vault in the Melbourne General Cemetery. He leaves a widow and two children.

Arthur Oakes, M.D., Edin. et Syd., Bexhill-on-Sea, England.

Dr. Arthur William Oakes, youngest and only surviving son of the late Hon. George Oakes, died at his residence, Bexhill-on-Sea, England, on March 23, at the age of 51. Dr. Oakes, who was a native of Parramatta, was educated at Newington College, after which he went to Edinburgh University, where he obtained the degree of M.D. Returning to Sydney he settled down in private practice at Woollahra for a time, but on the death of his father he returned to England, and there practised his profession. He leaves a widow and two daughters.

Dr. Sydney H. Schrader, of Waverley, died on March 24th, after a long illness. The deceased was a native of Walcha, N.S.W. He took his M.D. degree in 1898, in California. He leaves a widow, but no family.

We regret to record the deaths of Dr. John Gray, of Melbourne, a retired medical practitioner, aged 84; and of Dr. Charles Johnson, a retired medical practitioner, an old resident of Parramatta, aged 74 years. He took the degree of M.R.C.S. Eng., in 1850, M.B. Dub., in 1869, and M.D. Dub., in 1872. He practised at Goulburn, at Penrith, at Picton, at Burwood, and then for many years at Parramatta.

PUBLIC HEALTH.

New South Wales.

Metropolitan Vital Statistics.—During the month of February, 1902, 922 children were born. This total is 11 greater than the average for February during the previous five years. The deaths during the month numbered 425, or five greater than the quinquennial average for February. Balance of births over deaths, 497. The birth rate was 1·83 per 1,000 of population, and the deaths were ·85 per 1,000. Infantile mortality under 1 year, compared with the births for the month, was at the rate of 108 per 1,000 for the city, and 115 for the suburbs. Of the 425 persons who died, 143, or 33·6 per cent, were under five years of age, and 106, or 24·7 per cent., were less than one year old. Zymotic diseases caused 54 deaths, whooping cough, 11 deaths; diarrhoea, 10; typhoid fever, 7; bubonic plague, 7; diphtheria, 4; scarlet fever, 2. From constitutional diseases there were 88 deaths; phthisis, 38; cancer, 32. Developmental diseases produced 25 deaths; senile decay, 12. Local diseases caused 212 deaths; nervous diseases, 48; apoplexy, 14; meningitis, 8; pneumonia, 14; enteritis, 47. Marriages, Births and Deaths in each Registry Division and District of the State, 1901:—Marriages, 10,538; births, 37,875; deaths, 16,021; excess of births over deaths, 21,854.

Newcastle District Vital Statistics.—During the month of February, 1902, there were 153 births, or at the rate of 2·75 per 1,000 of the population. The deaths numbered 61, or 1·10 per 1,000 of population. Of the deaths, 31 were due to local diseases, 10 to developmental, 8 to zymotic, 8 to constitutional. Of the persons who died 34, or 56 per cent, were under five years of age, and 28 were less than one year old.

The Bubonic Plague in Sydney.—The total number of cases to date is 97. There have been 30 patients cured, and 26 have died. There are still remaining under treatment at the Coast Hospital 36. One case has occurred at Newcastle.

Appointment of Female Sanitary Inspectors.—A deputation from the Women's Progressive Association recently waited on Dr. Ashburton Thompson, the President of the Board of Health, to urge the appointment of female sanitary inspectors. Dr. Ashburton Thompson said he was thoroughly in accord with the ideas advanced by the deputation. He considered no sanitary staff was complete without female inspectors. He had a knowledge of what success had followed the appointment of lady inspectors in England and other parts, and he would gladly place the whole matter before the Board of Health with a favourable endorsement to the proposal.

Victoria.

West Melbourne Corporation Tip.—The condition of the City Corporation tip at West Melbourne was again referred to at a meeting of the Board of Public Health on April 1st. The chairman (Dr. Gresswell) stated that the tip was overrun by rats and other vermin, and constituted a menace to the health of the metropolis.

Infectious Diseases.—The number of cases of typhoid, diphtheria, and scarlet fever reported to the Board of Public Health for the fortnight ending 29th March last show that they are much less numerous than during a similar period last year. In 1901

the cases of typhoid for the whole State numbered 242, with 7 deaths. In 1902 the number was 187, with 6 deaths. For the metropolitan area the figures were 68 (3 deaths) and 67 (2 deaths) respectively. Diphtheria cases for the whole State were 48 (4 deaths) and 67 (2 deaths), and for the metropolitan area 28 (1 death) and 17 (1 death) respectively; and of scarlet fever the cases numbered 13 and 23 respectively for the whole State, and 6 and 16 for the metropolis and suburbs, with no deaths in either year.

An agreement between the Orient Pacific Company and the Health Department, by which the crew are exempted from medical inspection coming from Sydney, provided they do not land, was put into effect on 1st April on arrival of R.M.S. Ortona.

Metropolitan Vital Statistics.—The births of 971 children were registered in greater Melbourne during the month of February, 1902. The number was higher than in any previous corresponding month since 1894, except 1898, but was below the average of the month during the previous ten years, or 139 below it, if allowance be made for the increase of population. The deaths recorded in the same month numbered 535; births thus exceeding deaths by 436, or 81 per cent., as against 57 per cent. in February, 1901, and 70 per cent. according to the average. The number was 65 less than in February, 1901, and the lowest recorded for the month during the last eleven years. It was also 75 below the average of February during the previous ten years, or 118 below it, allowing for the increase of population. Children under five years of age contributed 89 per cent. to that mortality. The deaths of infants under twelve months numbered 164. Of the total deaths during the month under review, 55 were from zymotic diseases (enteric fever 12, diarrhoea 17); constitutional diseases, 102 (malignant diseases 26, phthisis 60); development diseases, 49 (premature birth 21, old age 17, ages varying from 70 to 92); local diseases, 270 (diseases of nervous system 45, diseases of circulatory system 45, heart diseases 20, diseases of the respiratory system 37, pneumonia 22, diseases of the digestive system 106, enteritis 77). As compared with the corresponding month of the preceding year, there was an increase of 6 deaths under zymotic diseases, 13 under development diseases, whilst there was a decrease of 24 under constitutional, and 55 under local diseases.

Small-pox in the Bay.—The steamer *Indradevi*, which reached Hobson's Bay from New York on April 2nd, reported a case of sickness on board. By signalling from a distance, it was elicited that a case of apparent small-pox in a mild form had developed soon after the vessel sailed from New York, and that at intervals three other members contracted the disease, the last of whom was now on the way to recovery. Dr. Norris was quite in accord with Dr. Maclean that the disease was small-pox, and the yellow flag was hoisted. The *Indradevi* discharged the Melbourne portion of her cargo into lighters in the Bay. Those of the crew, numbering 60, who had not been vaccinated were urged to undergo that process, and they will all remain in quarantine until it is considered safe for them to land.

South Australia.

Central Board of Health.—At a meeting of the Central Board of Health, Adelaide, on March 26, the secretary for the Local Board for Spalding forwarded a report from the officer of health referring to a statement that the probable cause of a case of

typhoid at Reynolds was drinking "dam water containing typhoid germs."

The officer of health for Petersburg furnished a report on recent cases of typhoid fever in that town. He was unable to detect any insanitary condition of the milk or water supplies. He attributed the present epidemic to the fact that the excreta of the first patient was thrown about the back yard without previous disinfection.

The officer of health for Millicent sent a report on an outbreak of scarlatina.

Reports of plague in Cape Colony for the week ended February 15 and in Sydney for the week ended March 15, were read and received.

The infectious diseases returns showed 12 cases of typhoid fever at Port Pirie, 4 at Petersburg, 3 at Adelaide, and 1 at each of the following places:—Bundaleer, Brompton Park, Forreston, Millswood, and Wallaroo; 2 cases of pulmonary tuberculosis at Adelaide, 1 near Clarendon, and 1 at Gilberton; 1 case of diphtheria at each of the following places:—Adelaide, Murray Bridge, Port Broughton and St. Peters; 1 case of erysipelas at each of the following places:—Adelaide, Brompton, and Thebarton; 3 cases of scarlatina at Millicent. The infectious disease mortality returns showed 1 death from pulmonary tuberculosis at each of the following places:—Glanville, North Adelaide, Goodwood, Port Pirie, Keawick, Adelaide, Parkside Lunatic Asylum, Bowden (residence), died in train between Islington and Adelaide, Whyte-Yarcowie, and Adelaide Hospital; and 1 death from enteric fever at Wallaroo Mines.

Vital Statistics.—During the month of January, 1901, 714 births were registered (in the State), the average for five years being 749. In the month of January, 1901, 387 deaths took place (zymotic diseases 39, constitutional 52, developmental 38, local 158), the average death rate being 394 for the five period. During January, 1902, 740 births were recorded, and 383 deaths (zymotic diseases 54, constitutional 54, developmental 48, local 175). During the month, 90 children under one year of age died (diarrhoea 16, enteritis 15, debility 14). Returns for the City of Adelaide show that in January, 1901, 73 births were registered, the average for five years being 70. The deaths recorded amounted to 89, and the average for five years being 80, the rate per cent. being '264 in 1897, '258 in 1898, '216 in 1899, '172 in 1900, and '227 in 1901. Of these 89 deaths in January, 1901, 10 were from zymotic diseases, constitutional 15, developmental 11, local 43. Of children under one year of age, 17 died during the month under review (diarrhoea 4, debility 2, congenital defects 2, premature birth 2).

Queensland.

Vital Statistics.—During the month of January, 1902, 142 births were registered in the district of Brisbane, the number being 3 less than in the previous month. There were 92 deaths recorded in the district of Brisbane during the month of January, 1902, the excess of births over deaths being 50. The number of deaths was 13 less than that registered in the previous month. Of the deaths, 26 were of children under five years of age, and 22 were under one year of age. In the suburbs outside the district of Brisbane there were 124 births and 26 deaths registered during January, 1902, 15 of these being under five years, and 11 under one year of age. Of these, 118 deaths occurring in the district of Brisbane and its suburbs outside that district; 15 deaths occurred from zymotic diseases, 26 from

constitutional diseases (phthisis 12, cancer 6), 58 from local diseases (enteritis 18).

Bubonic Plague.—Report for week ending at midnight on Saturday, April 5th, 1902:—Remaining under treatment, 22; reported during week, 5; died during week, 1; remaining under treatment April 5th, 18. Total number of cases reported to date, 33; total number of deaths, 8; total discharged recovered, 9. Total number of contacts isolated, 241; number of cases among contacts, 4. Brisbane, 36 cases; Rosewood, one case; Townsville, one case.

West Australia.

Vital Statics.—During the quarter ending December, 1901, 1,354 births and 640 deaths were recorded in the registration district of West Australia. Of this number of deaths, zymotic diseases caused 95 (measles 14, enteric fever 22, diarrhoea 18, dysentery 10), constitutional diseases 84 (malignant disease 25, phthisis 43), developmental diseases 45 (premature birth 22, old age 21), local 291 (inflammation of brain 12, endocarditis 12, heart disease undefined 16, bronchitis 14, pneumonia 39, enteritis 8), violence 71 (fractures, contusions, 30; drowning 11, suicide 8).

New Zealand.

Vital Statistics of the principal towns of New Zealand during the month of January, 1902.—Births numbered 476, an increase over the previous month of 88. The deaths numbered 187, being 31 more than those registered for December, 1901. Forty-six of the deaths were of children under five years of age, being 24·60 per cent. of the whole number; 39 of these were under one year of age. There were 49 deaths of persons of 65 years and upwards. Zymotic diseases caused 19 deaths (diarrhoea 16); constitutional diseases accounted for 40 deaths (cancer 13, phthisis 19); developmental diseases caused 18 deaths (senile decay 11); local diseases were responsible for 97 deaths (disease of the circulating system 24, of the respiratory 17, 24 of the digestive).

Report on the Vital Statistics of the four chief towns of New Zealand for the year 1901.—Auckland and suburbs:—1,448 births and 577 deaths were registered during the year 1901; Wellington and suburbs, 1,326 births and 508 deaths; Christchurch and suburbs, 1,180 births and 577 deaths; Dunedin and suburbs, 1,280 births and 613 deaths. The birth-rate for the whole colony in 1901 was 26·34 per 1,000. The total number of deaths occurring in the above four towns during the year 1901 was 2,275. The death-rate for the colony in 1901 was 9·81; of these deaths 209 were from zymotic diseases (influenza 74, diphtheria 13, typhoid fever 24); constitutional diseases, 471 (cancer 154, tubercular meningitis 23, phthisis 207, diabetes 24); developmental diseases, 227 (premature births 93, old age 115); local diseases, 1,125 (meningitis 28, apoplexy 79, paralysis 31, convulsions 44, heart disease 172, bronchitis 111, pneumonia 135, enteritis 59). The total of deaths under five years was 618, or 27·16 per cent. of all deaths. The mortality from tubercular diseases for 1901 was 11·56 per cent. of the total deaths. The mortality from cancer was 6·77 per cent. of deaths from all causes during the year.

Tasmania.

Vital Statistics.—The Government Statistician's report on vital statistics of the State shows that during the month of February 129 births were

registered in the registration districts of Hobart and Launceston. This is 4 more than in the corresponding month last year; and an increase of 21·2 as compared with the average of the births registered in February during the last five-yearly period. To every 1,000 of the population of the two districts the proportions of births registered were as follows:—For Hobart, 2·42; for Launceston, 2·11; all, 2·30. Deaths.—The deaths registered in February in Hobart and Launceston numbered 61. The total number of deaths registered in the two districts is 3 less than in the corresponding month last year, and shows a decrease of 16 as compared with the average number of deaths registered in February during the last five-yearly period. To every 1,000 of the population of the respective divisions the proportion of deaths registered were as follows:—Hobart, 1·04; Launceston, 1·17; all, 1·09. The deaths under 5 years of age numbered 17, or 27·88 per cent., of which 11 were under 1 year of age; and the deaths 65 years and upwards numbered 22, or 36·06 per cent. In the country districts the returns are:—Births: Total for all country districts, 254, or 2·15 per 1,000 of the population.

HOSPITAL INTELLIGENCE.

The Women's Hospital, Melbourne.—At a meeting of the committee of the Women's Hospital last week letters were received from Dr. O'Sullivan, chairman of the hon. medical staff, and Dr. Cuscaden, of the midwifery staff, declining the invitation to attend meetings of the committee, as such attendance under the stipulated conditions carried neither authority nor status.

At a meeting of the committee of the Women's Hospital recently Colonel Goldsten moved:—"That the resident surgeon on the midwifery staff be a medical officer of at least 10 years' standing." He said the difficulty had arisen through the boycotting of the hospital and their inability to get applicants for vacancies on the midwifery staff. The motion was carried with an alteration of the period to three years, and the addition to the words "at a salary of £250 per annum."

Janet Lady Clarke, president of the Melbourne Women's Hospital committee, who has left for London, sent a parting letter to the committee stating that she proposed to visit some of the hospitals in London and Paris to obtain some valuable hints relative to the management of those institutions.

Launceston Hospital.—At the Hospital Board meeting last month it was reported that the receipts for the past month amounted to £541 11s., and the expenditure to £696 17s. 11d., showing a deficit on the month of £155 6s. 11d.

Brisbane Hospital.—From the fifty-third annual report of this hospital we learn that the number of beds is 254. There were in the institution on the 1st January, 1901, 190 patients; admitted during the year, 3,051; total number under treatment, 3,241. There were—Cured or relieved, 2,584; discharged, incurable, 183; removed to lunatic asylum, 15; died, 277; making a total of 3,059. There remained in the institution on 31st December 182. The greatest number of inmates at any time during the year was 242; the smallest, 161; and the average, 204. The average stay in the hospital was 21·9 days. The out-patients numbered 6,245 at the hospital, and 717 at the South Brisbane branch dispensary; and the respective attendances were 23 551 and 4,527.

Finance.—The amount received from in-patients was £1,148 14s. 7d., and from out-patients £391 15s. From Government patients, £3,047 2s. The total cost per bed during 1901 was £71 10s. 1½d., as compared with £76 12 8½d. during 1900, notwithstanding an increased cost of £700 for meat, drugs, and dressings during the year 1901.

Operating Theatre.—Without materially encroaching on the funds of the hospital the Committee have been enabled to effect important improvements in the operating theatre. By the removal of a dividing wall, and the addition of a large skylight, a convenient apartment for administering anaesthetics has been provided on one side, while on the other side a new room has been built. The theatre is now supplied with a modern operating table, a large dust-proof instrument cabinet, instrument tables on india-rubber castors, and a triple lavatory, furnished with foot-taps both for supply and waste. In the new annexe is being fixed a large sterilizer and an apparatus for providing the lavatories in the next room with hot water. This comprises a small boiler heated by gas, a copper cylinder and a supply cistern served by a Berkefeld filter. Arrangements were made to supply the operating-room with electric light. The connections were made, tested, and proved completely satisfactory, but difficulties arose concerning the insurance, and the supply of power has, therefore, for the present been cut off.

Sanitary System.—The Inspector-General of Hospitals, Dr. Hare, has reported very strongly in condemnation of the earth-closet, and recommends a water-closet system and septic tank.

Queen Victoria Home for Consumptives Fund.—A meeting of the Executive Committee of the Queen Victoria Home for Consumptives Fund was held at the Town Hall on April 9th, the Mayor presiding, to receive tenders for the erection of a new sanatorium at Wentworth Falls. Dr. Cecil Purser, Hon. Secretary, reported that since the last meeting two sub-committee meetings had decided to retain the services of the caretaker and his wife at Mr. Kelso King's property. Advertisements had appeared in various papers and medical journals in different parts of the world, applying for a medical officer for the home, and a number of applications had been received. As many of the applicants had been medical officers at similar institutions, they had a very good choice. The home was to accommodate 20 male consumptives in the early stage. There were to be three pavilions, 30 ft. by 20 ft., and 12 ft. high, each containing six beds. Two single-room cottages, 12 ft. by 12 ft., and 10 ft. high, and a dining room 48 ft. by 20 ft., one end of which to be partitioned off for a sitting room. In all, some fifteen tenders had been received. The water was to be supplied from Picton, and the pipes were now on the ground awaiting to be laid. Mr. LEVY moved, and Dr. SYDNEY JONES seconded, "That Colonel Goodlet and Dr. Purser, with the honorary architects, be empowered to accept the most satisfactory tender." It was also decided that the advisory committee, which had been already acting, be asked to continue to act, in conjunction with the architects, as a building committee. Mrs. Richards, of Randwick, was appointed acting Hon. Treasurer in the place of her daughter, who is in England. A committee, consisting of Drs. S. Jones, W. C. Wilkinson, Scot Skirving, Bennie and C. Purser, were appointed to select the applicant for the position of medical officer for the sanatorium. The hon. architects estimated that the home would be ready for occupation in five months from the date of starting work. The meeting closed with a vote of thanks to the Mayor.

Grants to Hospitals in Victoria.—The Premier, who visited Clunes Hospital recently, made it very clear to a deputation which waited upon him that there is no money available for building grants to charitable institutions in the State. The Clunes Hospital Committee having asked for a grant of £100 towards repairing the roof of the building, Mr. Peacock said there was absolutely no building fund from which a grant could be made.

Miss M. E. Crawford, late matron of Queens-town Hospital, Tasmania, who was recently dismissed, and subsequently entered an action against the Board of Management for £125, for wrongful dismissal, has, through her solicitors, Messrs. Urquhart and Omant, withdrawn the case.

MILITARY INTELLIGENCE.

WILLIAM EDWARD REDMAN, to be Surgeon-Captain to the New Zealand Volunteer Medical Staff.

Dr. A. W. Falconer, late assistant medical officer at Seacliff Asylum, N.Z., to be Surgeon-Captain of the South Island Battalion of the Ninth Contingent.

Colonel W. D. C. Williams, having finished his survey of the Tasmanian Army Medical Service, returned to Melbourne. He left on 24th March for Western Australia via Adelaide, to report upon the medical services of both South Australia and Western Australia.

MEDICO-LEGAL.

Breach of Medical Act of N.Z.: "Dr. of Psychology."—At the Magistrate's Court at Palmerston North, on March 8rd, Emanuel Arthur Pineles was charged with using the title of "Dr." and not being registered under the Act. Evidence was also given that accused had treated several patients, and advertised as Dr. Pineles. For the defence a diploma bearing the seal of the Chicago School of Psychology, which accused stated he obtained by examination in October, 1901, was produced. He did not call himself a medical man, but Dr. of Psychology. Accused was fined £20, with costs. Notice of appeal was given.

Charge of Manslaughter.—At the recent sitting of Central Criminal Court, Sydney, Eleanor Brown, a nurse, pleaded not guilty to a charge of having, on February 22nd, at Sydney, feloniously slain Frances Rachael Meadows Cox, by procuring abortion. The jury, without leaving the box, found accused not guilty, and she was discharged.

Boarded-out Infants.—During an inquest held recently at Ballarat, Victoria, on the body of a boarded-out child, the coroner, during his examination of the nurse, Matilda Allen, of Urquhart Street, elicited that during the last four years she had taken care of sixteen children, of whom no fewer than ten had died from various causes. The coroner remarked to the jury that, although there was no evidence of ill-treatment, he felt compelled to ask them to recommend the cancellation of the nurse's registration. The jury added a rider in accordance with the direction of the coroner.

Breach of Medical Practitioners' Act, N.S.W.—At the Redfern Police Court, 8th April, Richard Hingston was proceeded against on an information that, not being a legally qualified medical practitioner, within the meaning of the Medical Practitioners' Act

of 1898, he used the words "Registered Qualification, 'M.R.C.S.," implying that he was a legally qualified medical practitioner within the meaning of the Medical Practitioners' Act of 1898. For the defence, Richard Hington stated that he obtained the degree of "Member of the Royal College of Surgeons" in England in 1895, but on the way out from England his diploma was destroyed by fire. He had no proofs of his qualifications other than those in his possession, and he believed he would have to return to England to obtain a duplicate of his diploma. He had been informed that his name was not on the published list of the Royal College of Surgeons in England. He could not account for that. The magistrate said that, in his opinion, he was not a member, and that he had never held a diploma of the Royal College of Surgeons. Defendant was then fined £50; in default, three months' imprisonment. A month was allowed for the payment of the fine.

MEDICAL NOTES.

The Kalyra Sanatorium, South Australia.—The Committee has just added a new wing to this building, to be called the "Old Colonists' Wing," at a cost of £1,200, which will provide accommodation for 12 patients, and if they had sufficient funds available they would gladly undertake the responsibility of duplicating the number of rooms and providing for the treatment of the extra cases which they could then receive. Lord Tennyson and Mr. Goode, at the opening ceremony, made eloquent appeals for help in this direction, and clearly pointed out the benefits which would result from the speedy accomplishment of the object in view.

Adelaide University.—A meeting of the senate of the Adelaide University was held at the University on Wednesday, March 26, under the chairmanship of the warden, Mr. F. Chapple. Amended regulations governing the degrees of bachelor of medicine and bachelor of surgery and the senior public examination were approved.

Cancer in Ireland.—The statistics of cancer in Ireland are shown by the Registrar-General to present extreme contrasts. For one death in Kerry, in a given population, there are four in Armagh, and three in Dublin and Londonderry; and generally the entire west and centre of the country are much freer than the east and south. Such contrasts imply causes—the most prosperous, the longest settled, the most populous, the least Celtic counties suffer most. Poor Connaught and the poorer parts of Munster, those sections of Ireland where the Celtic race is purest, where a buttermilk, Indian meal and potato diet is most prevalent, and population thinnest, are most exempt from cancer. Here are factors to be considered of race, settlement, rural *versus* urban employment, mostly vegetarian *versus* mixed and animal diet, and a comparatively low and high marriage rate. Between Armagh, with over ten deaths per 10,000, and Kerry with only 2.76, is a wide gap to be explained by some order of causation.

Civil Ambulance and Transport Brigade, Sydney.—The sixth annual meeting of the Civil Ambulance Brigade of Sydney was held on 26th March. The report showed that during the year 2,116 patients had been conveyed by the brigade to the various hospitals and homes. As compared with the previous year, the record for the past twelve months was an increase of 317 cases attended. During the past six years 8,081 persons had received the benefit of first aid, and been conveyed to hospitals or their own homes.

£902 11s 11d. had been received by subscription, collecting boxes had yielded £22 2s. 4d., and other sources of revenue £262 5s. 2d., making a total of £1,186 19s. 5d. The Brigade received no support from the Government, a fact the Chairman, Mr. Justice Cohen, emphasised as being particularly pleasing.

The Disabilities of Consumptives.—A case where the law bears very harshly on the individual for the benefit of the community at large has attracted some attention in Dunedin (writes the correspondent of the *Australasian*). A man with a wife and family applied for assistance from the council of the borough of Roslyn, where he resides. He had been employed in a leading biscuit and confectionery factory, but was found to be suffering from consumption, and, under the Health Act of last session, as soon as this came under the notice of the health officer, he had to be dismissed, and was thus prevented from earning his living, though able and willing to do so. Much sympathy has been expressed for the man and his family, and the question suggests itself whether, when the State deprives a person of the means of livelihood, he should not be provided for by the State. It also points to the necessity for a sanatorium, where consumptives could be sent by the State, in the hope that a cure might be effected.

PERSONAL ITEMS.

Dr. B. CROWTHER, of Hobart, Tasmania, has returned from seat of war and resumed practice.

Dr. VON LEE, of Derby, Tasmania, recently had a narrow escape from losing his life. While driving along the road in a buggy he noticed a tree falling across the road, and had the presence of mind to jump out. The tree smashed the buggy, and greatly maimed the horse.

Dr. W. A. LOGAN, who has been acting resident surgeon at the Timaru Hospital for the last eight months, has resigned the position, owing to ill-health.

Dr. FRANK OGSTON has returned to Dunedin after inspecting the country districts. He reports Queens-town, Arrowtown, and Kaikangata to be in a very bad condition sanitarily.

Dr. and Mrs. COLQUHOUN, of Dunedin, have recently returned from a visit to Stewart Island.

Dr. MILLEN COUGHTREY, of Dunedin, has been elected to represent Park Ward in the St. Kilda Borough Council.

Dr. MACGREGOR, the Inspector of Asylums, has been granted six months' leave of absence to visit the old country, and during his absence the asylums and hospitals department will be administered by Dr. Truby King, of Seacliff, Otago, New Zealand.

Dr. G. MARCHESINI has removed from Henty, New South Wales, to Rutherglen, Victoria.

Dr. P. F. W. BLUETT, formerly of Wellington, New South Wales, has settled at Rakai, Canterbury, New Zealand.

Dr. J. L. CUPPAIDGE has returned from Europe, after an absence of seven years, and resumed practice at Gympie, Queensland.

Dr. H. SKIPTON STACY, lately resident pathologist at the Sydney Hospital, has commenced practice at 183 Liverpool-street, Sydney.

Dr. W. R. CLAY, late of Arncliffe, having returned from a trip to England, has started practice at Hornsby, New South Wales.

Dr. R. A. ROBINSON has succeeded to Dr. Edmonds' practice at Pittsworth, Queensland.

Dr. H. H. MCWILLIAMS has removed from Bairnsdale, Victoria, to Waratah, Tasmania.

Dr. VICTOR BLACK has left Southern Cross for Katanning, Western Australia.

Dr. A. PENTLAND, formerly of West Maitland, having just returned from a trip to Europe, has commenced practice at 151 Macquarie-street, Sydney.

Dr. J. STEWART, formerly of Bodalla, New South Wales, has succeeded to Dr. Noonan's practice at Hamilton, Tasmania.

Dr. L. D. PARRY, late of Murrumburrah, has commenced practice at Picton, New South Wales.

Dr. C. S. WILLIS, late of Clermont, Queensland, has commenced practice at Clayfield, Brisbane.

Dr. T. E. ICK has removed from Jarrahdale to Broad Arrow, Western Australia.

Dr. H. F. H. ELVINS has removed from Ararat to Clunes, Victoria.

Dr. CHERRY, director of Bacteriology at Melbourne University, has been appointed to succeed Mr. H. W. Potts as bacteriologist and scientific expert to the Victorian Agricultural Department, at a salary of £600 per annum. Dr. Cherry will still retain his University position, but will devote almost the whole of his time to his new duties.

Dr. ROBERT SCOTT has been elected chairman of the honorary medical staff of the Ballarat Hospital, in place of the late Dr. Pinnock.

MEDICAL APPOINTMENTS.

The following Medical Appointments are announced :

NEW SOUTH WALES.

Bean, Harold Knowles, M.D., C.M. Edin., B.Sc. Edin., to be Government Medical Officer and Vaccinator at Wallasey, *vice* Dr. J. J. Stapleton, deceased.
Burkitt, E. H., M.B. Syd., to be a Member of the District Board for Old-age Pensions at Dubbo, *vice* Dr. W. H. Tibbits, deceased.
Ercle, Quinto, M.D., Ch. D. Bologna, to be Government Medical Officer and Vaccinator at White Cliffs, *vice* Dr. W. H. Gaze, resigned.

VICTORIA.

Cole, Robert Hodgson, M.B., LL.B. Melb., to be a Coroner for Victoria.
D'Ombrian, Ernest Arthur, M.B., to be Public Vaccinator for South-Western District.
Dunlop, Sheeldham Henry, M.D., to be Public Vaccinator for North-Western District.
Evisa, Henry F. H., M.B., to be Medical Officer of Health, Borough of Clunes, during absence on leave of Arthur H. Gordon, M.R.C.S.
Gmelin, Otto Ferdinand, M.D., to be Acting Officer of Health, Shire of Upper Yarra, *vice* Ezra Hurburt Williams, M.D., deceased.

Lynch, Peter, L.R.C.P., to be Public Vaccinator for Metropolitan District, *vice* James De Burgh Griffith, M.B., resigned.

Macquarie, Charles Nicol, L.R.O.P., to be Medical Officer of Health, Shire of Oneco, *vice* John Robert Lee, M.B.

Macquarie, Charles Nicol, L.R.O.P., to be Public Vaccinator for North-Eastern District, Victoria.

McGee, William, L.K.Q.C.P., to be Officer of Health for Shire of Phillip Island and Woolamal.

McLean, Donald, M.B., to be Medical Officer of Health, Shire of Dunmunkle, East Riding, *vice* James Booth, L.R.C.P., resigned.

McLean Donald, M.B., to be Public Vaccinator for North-Western District.

Owen, Frederick James, M.D., to be Public Vaccinator for Reedham District (Acting), during the absence of A. W. Esler, M.D., on leave.

Reid, Matthew Alexander, M.B., to be Acting Officer of Health for City of Richmond during the absence on leave of George Attenborough Branson, M.R.C.S.

Rosenthal, Jacob, M.B., to be Public Vaccinator for Midland District, *vice* J. S. Thwaites, M.B., resigned.

Shanasy, Thomas, L.R.O.P., to be Officer of Health for Shire of Lowan.

Tighe, John M., L.R.C.P., to be Medical Officer of Health, Shire of Yarrowonga, during absence on leave of Edward F. O'Sullivan, M.D.

WESTERN AUSTRALIA.

Duncan, Dr. S. V., to be District Medical Officer and Public Vaccinator for the District of Kookynie.

Gurdon, Dr. E. J., to be Officer of Health at Nannine, W.A., *vice* Dr. Belgrave, resigned.

ICK, T. Edwin, to be Public Vaccinator for District of Broad Arrow, W.A., *vice* R. P. Brown, resigned.

Thurstan, E. Paget, M.D. Cantab., M.R.C.S. Eng., to be Acting District Medical Officer at Katanning, during the absence on leave of Dr. Thos. Wilson.

SOUTH AUSTRALIA.

The undermentioned persons have been appointed to be the Board of Management of the Adelaide Hospital, viz. :—

Hayward, William Thornborough, M.R.C.S.; Hill, Alfred William, M.D.; Rogers, Richard Sanders, M.A., M.D.

Todd, Dr. C. E., to be hon. assistant surgeon at the Adelaide Hospital.

QUEENSLAND.

O'Brien, Daniel P., F.R.C.S.I., to be Visiting Medical Officer to the Meteor Park Orphanage, Stanwell, Rockhampton, *vice* D. S. Macdonald, M.B., &c., deceased.

NEW ZEALAND.

Brown, Dr. George, to be Senior House Surgeon at Dunedin Hospital, *vice* Dr. Hall, resigned.

Roberts, Edward John, M.B., of Nelson, to be a Medical Practitioner under 'The Workers' Compensation for Accidents Act, 1900.'

Sale, Dr. J. B., to be Junior House Surgeon at Dunedin Hospital.

Stowe, William Reginald, M.R.C.S. Eng., L.R.C.P. Lond., to be Public Vaccinator, for the District of Palmerston North.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

VICTORIA.

Brade, Gerald Francis, M.B. Syd. 1899.
Gilbert, Henry, M.B. et Ch.B. Melb. 1901.

Additional Qualification Registered :

Gibbs, Richard Horace, F.R.C.S. Edin. 1901.

Deceased Practitioner erased from Register :

Figg, Edward Garland, L.F.P.S.

TASMANIA.

McWilliams, Henry Heber, L.R.O.P. Edin. 1899, L.R.C.S. Edin. 1899, L.F.P.S. Glasg. 1899.
Stewart, John, L.K.Q.C.P., Irel. 1887, L.R.C.S. Irel. 1887.

QUEENSLAND.

Macleod, Roderick Alexander, Brisbane, M.B., Mast. Surg. 1887 Univ. Glasg.
Williams, Charles Emanuel, Mackay, M.B., B.S., 1901, Univ. Melb.

Additional Qualification Registered :

Turner, Dr. A. Jeffries, D.P.H. Camb. 1901.

Ure, Edith, Brisbane, M.B., 1902, Univ. Sydney.

Republication :

Cuppajidge, John Loftus, Gympie, M.D. 1884, M.B., Bac. Surg. 1880, Univ. Dubl.

BIRTHS, MARRIAGES AND DEATHS.

BIRTHS.

- BROINOWSKI.—On the 6th March, at Orange, the wife of Dr. G. H. Broinowski, Hay, N.S.W., of a daughter.
- CURGENVEN.—On the 9th March, at Fitzroy, Ellen, wife of William Brendon Curgenven, L.R.O.P., M.R.C.S., of a son.
- FULLERTON.—On the 13th March, at the corner of Rowan and Wattle Streets, Bendigo, the wife of R. J. Fullerton, L.R.O.P. and S., Edin., &c., of a son.
- GIFFORD.—On the 10th March, at "Meringa," Croydon, the wife of G. H. Gifford, of a daughter.
- GILLIES.—On the 4th April, 1902, at 293 Elizabeth Street, Hyde Park, Sydney, the wife of Sinclair Gillies, M.D., of a son (still-born).
- GOLDSMID.—On the 27th March, at her residence, Murwillumbah, Tweed River, N.S.W., the wife of Dr. J. Albert Goldsmid, of a son.
- GRAHAM.—On the 14th March, at "Bomoo," Denillquin, the wife of R. Alfred Graham, M.B. et Ch.B., of a son.
- IRWIN.—On the 5th April, 1902, at her residence, "Windermere," Singleton, N.S.W., the wife of Dr. William Irwin, of a son.
- MCARTHUR.—On the 7th March, at "Newby," Toorak, the wife of A. Norman McArthur, M.R.C.S., of a daughter.
- MILLARD.—On the 5th April at Wahroonga, the wife of Dr. R. J. Millard, of a daughter.
- MILLER.—On the 23rd March, at Maryborough, the wife of W. F. Miller, M.R.C.S., of a daughter.
- MURPHY.—On the 9th March, at Nagambie, the wife of Dr. W. P. Murphy, of a son.
- REID.—On the 26th March, at "Burniston," Church Street, Richmond, Victoria, the wife of Dr. Peter Reid, of a son.
- ROGERS.—On the 15th March, at 83 Flinders Street, the wife of Richard Saunders Rogers, M.A., M.D., of a son.
- SHAW.—On the 19th March, at Emmaville, the wife of Dr. F. C. Seymour Shaw, of a daughter.
- TAYLOR.—On the 26th March, the wife of Dr. Taylor, of Wedderburn, of a daughter.

MARRIAGES.

- FOOKES—FARRINGTON.—On the 11th February, at St. Mary's Church, Lexington, England, Ernest Fookes, M.B., of New Plymouth, New Zealand, to Evelyn McLeod, eldest daughter of Col. Malcolm Farrington, 51st Yorkshire Light Infantry.
- HEGGATON—BURGESS.—On the 11th March, at St. Andrew's Cathedral, Sydney, by the Rev. R. J. Read, Rupert Dunfy Heggaton, M.B., Ch.M., of Murrumburrah, N.S.W., youngest son of William Heggaton, of Adelaide, to Elizabeth Louisa, youngest daughter of William Henry Burgess, of Richmond.
- KING—MASTERS.—On the 18th March, at All Saints', Petersham, by the Rev. R. E. Goddard, B.A., Rector, Aubrey Arthur King, M.B., Ch. M., youngest son of the late Richard Napoleon King, of Boolooroo Station and West Maitland, to Alexandra (Sasha), youngest daughter of Marion and the late Edward Masters, of "Luriei," Marrickville.
- LEMON—SOMMERS.—On the 5th March, at the residence of the bride's parents, "Karonda," Grove-road, Hawthorn, by the Rev. Herbert Taylor, Ferguson Augustus Lemon, M.B., B.S., seventh son of Robert Ferguson Lemon, of Melbourne, to Bertha Charlotte, fifth daughter of William Sommers, J.P. of Hawthorn.
- OFFICER—SCOTT.—On the 19th March, at St. John's, Warrnambool, by the Rev. D. Cameron, M.A., assisted by the Rev. J. Johnston, B.A., Edward A. Officer, M.D., Perth, W.A., son of the late John Officer, "Lilpook," Warrnambool, and "Humburn," Queensland, to Elizabeth B., daughter of James Scott, M.A., "Ashton," Warrnambool.
- SANDES—BLACK.—On the 19th February, at the residence of the bride's parents, Molong, by the Rev. J. Aldis, Francis Percival Sandes, M.B., Ch.M., of Sydney, to Alice May, third daughter of John Black, Esq.
- SHELDON—HERRMANN.—On the 2nd April, at St. Mary's, Ridge Street, North Sydney, by the Rev. G. Kelly, S.J., Herbert Sheldon, M.B., of Coonamble, N.S.W., third son of William Sheldon, M.D., of North Sydney, to Zara Estelle, eldest daughter of Mark Herrmann, of Coonamble.

DEATHS.

- HOUSON.—On the 21st March, 1902, at 118 Phillip Street, Sydney, Sarah, beloved wife of Andrew Houson, M.B.
- KINDER.—On the 2nd February, at the residence of her parents, Balclutha, Jane Kinder, M.B., B.Oh., N.Z., eldest daughter of John and Margaret Kinder, aged 32 years.
- SOHRADER.—On the 24th March, at his residence, "Ravenscraig," Ocean Street, Woollahra, Dr. Sydney Schrader, late of Waverley, aged 86 years.

DR. T. P. PUTNAM recently resigned his position as resident surgeon of the Melbourne Benevolent Asylum, having secured a similar appointment in another medical charity in Melbourne.

NOTICES.

THE "GAZETTE" IS EDITED FOR THE PROPRIETORS BY GEORGE E. RENNIE, M.D., SYDNEY, N.S.W.; AND FOR THE OTHER BRANCHES OF THE BRITISH MEDICAL ASSOCIATION BY A. B. BROOKWAY, BRISBANE, Q.; H. W. BRYANT, WILLIAMSTOWN, VIC.; J. B. GUNSON, ADELAIDE, S.A.; HERBERT HORROCKS, PERTH, W.A. ORIGINAL ARTICLES WILL BE INSERTED SOLELY ON CONDITION THAT THEY ARE NOT CONTRIBUTED TO ANY OTHER PERIODICAL.

All communications intended for publication may be addressed "The Editor, Australasian Medical Gazette, 121 Bathurst Street, Sydney," or to the Branch Editors for the other States. Business communications should be addressed "The Manager."

Contributors will have to pay the cost of illustrations accompanying their articles.

TO OUR CONTRIBUTORS.

In consequence of the great pressure on our space, we are obliged to hold over till next month some papers read at the Hobart Congress, all well as other matter.

WANTED by experienced Edinburgh University Graduate, good-class practice in Sydney suburb or in township on Southern line. A partnership, with view to ultimate succession, would be entertained. All communications will be treated as strictly confidential. Address: "N," care Messrs. Aplin, Brown and Co., Brisbane, Queensland.

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MALE ATTENDANT for mental, inebriate, or general cases, seeks engagement. References and testimonials show 13 years' experience, including five years as attendant at Callan Park Hospital for Insane, three years as wardman in charge of Singleton Hospital. Address: J. HILES, 161 Cecily Street, Leichhardt.

TRAINED MALE NURSE seeks engagement in mental or ordinary medical cases. Has had considerable experience in mental nursing, massage, etc., and is accustomed to travelling with patients to Europe and in the Australasian States. Unexceptional testimonials. References kindly permitted to Drs. F. N. Manning, Jarvie Hood, W. E. Warren, T. S. Dixon.

Address: R. T. O'NEILL, 68 Crown Street, near William St. (Late 17 Leicester St., Sydney.)

AUSTRALASIAN MEDICAL GAZETTE.

ON THE DIAGNOSIS OF ERYTHROMELALGIA AND RAYNAUD'S DISEASE.

By R. Scot Skirving, M.B., Lecturer in Clinical Medicine in the University of Sydney; Physician to Prince Alfred Hospital, Sydney.

"ERYTHROMELALGIA is a chronic disease, in which a part or parts of the body, usually one or more extremities, suffer with pain, flushing and local fever, made far worse if the parts hang down."

Such was Weir Mitchell's clearly expressed definition when describing what was then a new disease, in the year 1872.

A decade earlier, Raynaud, in France, had called attention to a striking collection of symptoms, indicative of profound vascular and nutritional disturbance, in which pallor, congestion with lividity, and local gangrene were the salient features—in effect, a local syncope, a local asphyxia, or a local death. To this malady the name of the describer has been applied by common usage—perhaps with greater justification than usually attends the use of eponyms.

Raynaud's disease, though rare, is probably sufficiently frequently seen to be familiar to most of us, in one or other of its manifestations.

Erythromelalgia, I have reason to think, is less well known to the profession. I have therefore thought it worth while to bring a case before you to-night, and to contrast its features with an example of Raynaud's malady which I am fortunate enough to have under my care at present. It is, however, to the former disease I wish specially to draw your attention. We all know in practice how comparatively few individual cases of disease adhere absolutely closely to the clinical type of the malady, as detailed in text books. Still, as a rule, the syndrome is sufficiently well defined, sufficiently fenced off from aberrant types, to allow of classification and contrast. I venture to think that my two cases fulfil these requisites in a degree ample enough to permit me to diagnose them definitely as examples respectively of erythromelalgia and Raynaud's disease—and further, to point out wherein they resemble or differ from each other.

CASE I. is that of a neurotic miner, aged 36, who has never had syphilis, malaria, or glycosuria, nor is there any evidence indicative of arterial degeneration. He has, however, drank

fairly freely, and lived a life of hardship with abundant exposure to wet and cold. He has worked in wet claims, and to this he attributes his present trouble.

Eighteen months ago he noticed that occasionally both his feet "went dead." They became at these times pale and sodden-looking. They were cold to the touch. Tactile, painful, and thermal sensations were equally blunted. There has never been any dissociation of sensibility, such as is sometimes met with in other neuro-trophic lesions, of which syringo-myelia is an example. Pain has scarcely been complained of, and, further, the attacks have only occasionally presented the second manifestation described by Raynaud, viz., a dusky cyanosed condition of the affected feet. In no part has the graver condition of gangrene supervened.

With this brief *resumé* of the leading features of this disease, I pass on to describe the example of erythromelalgia.

CASE II. is a man of 40, who has been for many years a telegraphist, but for the past four years has done only clerical and supervising work. He is distinctly neurotic—absolutely temperate, and has never had gout, syphilis, malaria, hæmoglobinuria or glycosuria. Last autumn, after a long period of overwork and worry his present illness began.

Pain and throbbing were first complained of in the fingers; later on, in the hands uncomfortable sensations troubled him, but hardly actual pain. Soon he noticed that the painful parts were red and hot, and that when the hand hung down these conditions were aggravated. The sensations of touch, pain, and temperature were in no way blunted; indeed, so far as tactile sensation goes, the patient thinks its acuteness is heightened. Further, let me lay stress on the fact that no stage of pallor preceded the hot flushed condition of these left digits.

The fingers in truth are somewhat swollen, and show at times a tense rosy glossiness. I can well understand how men have fallen into the mistake of thinking they had to deal with deep-seated inflammation, and so have made needless incisions.

The loss of muscular power of the affected hand is much more than the normal difference between the grasp of the right and left side should be. By a dynamometer, it is as ninety kilos are to forty.

There is some slight difference between the circumferences of the two fore-arms, but not, I think, more than may normally exist in right-handed persons. The general results of

electrical stimulation may be summed up by saying that there is a diminished response to both forms of current. In the case of faradism, this diminution is very clear and definite. In the nails you will note some small evidence of altered nutrition.

Perhaps you may also see, while you examine him, a profuse sweating of the affected part. This intermittent perspiration is most in evidence when the full development of rosy redness is present in the fingers. The patient is nearest the normal of physical comfort in the morning. His troubles increase towards night as a rule.

Occasionally, after long acute pain, he has "given way, collapsed altogether, and fallen into a sort of faint accompanied by profuse general perspiration." I quote here the patient's own words.

Lastly, he says his right hand is absolutely comfortable. I have, however, once or twice thought his finger-tips were redder than they should be. I do not know how it may be with them to-night. No changes of any kind have been observed in the fundus oculi.

These then are the salient symptoms in these two cases. I will now ask the patients to show you their affected parts.

In these brief notes I do not propose to discuss at length the various speculations as to the true pathology of these maladies. You will find them admirably set forth by a writer in "Allbutt's System of Medicine," to which article I am largely indebted for my knowledge of the subject and for references.

Probably many practitioners take the view that both diseases express in different degrees a peripheral neuritis. A careful survey of the subject does not incline me to accept this easy solution without some reservations. It certainly does seem to adequately explain the whole symptomatology of either affection.

So far as Raynaud's disease is concerned, his original view appears to me to hold its own, that "the vaso-motor centres are unduly irritable, and that the commonest irritant is from the periphery, for example, cold, and that the efferent impulses from the centre lead to the paroxysmal contraction of the arterioles." I am fully satisfied with this pronouncement, although I quite realise that other secondary factors, such as peripheral neuritis, or gross arterial change, may, and do, in certain cases, play a considerable part in the clinical features of the disease, especially perhaps in the graver cases where gangrene supervenes.

What I have just said applies equally well to the pathology of erythromelalgia. Surely

there must be some profound instability of the vaso-motor centre to start with. The rarer cases in which evidence of a generalised interference with vascular calibre lend likelihood to this view. At the same time, I quite agree with Barlow's remark that a possible explanation might be, to regard a neuritis, if really present, as entirely terminal, or, better still, to be a neuritis of vaso-motor fibres only, an assumption which the experience of all of us, in so protean a malady as peripheral neuritis, does not render improbable. However, as Barlow wisely adds, these views are purely speculative, and hardly fit in with the complete clinical picture of either disease.

This much is sure, at least, regarding erythromelalgia, that at whatever end of the nerve-mechanism controlling the blood supply the "vascular storm" begins, there is, to quote Barlow again, "either a paralysis of the vaso-constrictors or a stimulation of the vasodilators." In this disease, as in Raynaud's malady, there are also cases which suggest not only peripheral nerve trouble, but also arterial disease. With regard to the probability of the central vaso-motor mechanism playing a large part in the pathology of the disease, I have on several occasions used a comparison between erythromelalgia and writer's cramp, which I find, on looking up the literature of the subject, has been used by someone else. Allen Sturge puts the matter in one suggestive and fitting sentence:—

"Just as," he says, "over exertion of the co-ordinating centres of the hand will, in certain cases, cause writer's cramp, so, a prolonged over-exertion of the vaso-motor centres may be supposed to induce irregular action on their part."

The author of the article in Allbutt's system sums up the matter by saying that if the view be accepted of an irritable condition of the vaso-motor centres, brought about in various ways, it would seem possible to regard erythromelalgia and the three clinical types of Raynaud's disease as differing from one another in the extent of the "vascular storm," and in the order in which spasm and paresis follow one another. With this safe generalization many will be disposed to agree. In the diagnosis of these two conditions certain points are helpful.

In Raynaud's disease the majority of the cases are women. In erythromelalgia it is more common in men. I have seen at least three undoubted cases; two of them were men. This disease is usually asymmetrical; all these three cases were so. In Raynaud's disease a symmetrical distribution obtains. In erythro-

melalgia there occurs no initial pallor and bloodlessness; on the contrary, the arteries throb and the affected parts become a pinkish red colour and hot, while, above all, pain is an early and prominent symptom, and there is certainly no anaesthesia.

Now contrast these features with the cold dead appearance and touch of Raynaud's disease and its anaesthesia. Why, even its asphyxic stage is the lividity of strangulation and impending dissolution, rather than the inflammatory full-bloodedness of erythromelalgia. Note, too, how heat and a dependent position aggravate the symptoms of this latter disease.

The above remarks apply of course to fairly typical examples of either ailment. As one might expect, there are cases which meet both diseases half-way, and it is difficult to say to which class they should be assigned.

Regarding the treatment of erythromelalgia, which is most disappointing: I take it that rest from work and worry—perhaps a change of surroundings—are all proper general measures. I am using the constant current just now in this case, perhaps for no very good reason, except that it has been said to do good, I suppose, by improving vascular tone. Cold applications distinctly relieve the symptoms, and they do not seem to cause any later bad effects. As to physic, no doubt enthusiastic therapeutists have run the whole gamut of the pharmacopœia. I also confess to have tried a few drugs. Ergot, arsenic, iodide of potash, and strychnine are four of them. They do not seem to have done any actual harm. I have not yet ordered massage, nor have I considered, so far, the propriety of any operation on the nerves of the fore-arm.

[Read at the April meeting of the New South Wales Branch of the British Medical Association.]

PUERPERAL SEPSIS: ITS PATHOLOGY AND TREATMENT.

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To treat intelligently any disease, it is necessary to understand its pathology and morbid anatomy, and, as puerperal fever is a general term which fails to convey to the mind any precise meaning of the pathological processes involved, I intend to discard the phrase altogether, and to use terms which will express conditions of disease more in accord with our

present knowledge of the morbid anatomy of these processes.

As the successful treatment of pelvic disease, induced by uterine sepsis, depends greatly on the view one takes of its pathology, I intend to devote some little time to this subject; and I may say that it is owing to comparatively recent researches in pathological and bacteriological work that treatment of the results of uterine sepsis has been placed on a more satisfactory basis than heretofore. I use the phrase "results of uterine sepsis" advisedly, for sepsis is not the disease, but the cause of the disease, and it is just as logical to speak of septicæmia or sepsis, as a disease as it is to speak of the dirty piece of wood which enters a finger as the disease, not mentioning the whitlow, which is the result.

In earlier times knowledge of pathological and bacteriological processes were very imperfectly understood, and hence such names of diseases as septicæmia, sapræmia, pelvic cellulitis, peri-uterine phlegmon, peri- and parametritis, crept into more or less general use, and, even at the present day, are used more or less loosely; and the only excuse one can find for such terms is that their vagueness is the physician's safeguard, for no one can prove him wrong.

Let me say at once that all so-called puerperal fever due to sepsis is pelvic disease, and, until the profession at large appreciate this fact, the treatment of all such cases will be far from satisfactory; and as the treatment of these diseases falls altogether on the general practitioner, the sooner the pelvic trouble is diagnosed and treated vigorously the better for his patient and himself.

In the old days, puerperal fever was looked on as a bogey; one hesitated about attending any other cases while one was saddled with it, but it is just about as sensible to refuse attendance to-day because one opened an abscess the day before yesterday. In present days, no one amongst us would think of examining a puerperal patient without washing his hands, and taking all precautions against infecting his patient; and one reason, the main one, I believe, for the old idea of personal infection of one's patient was, that surgical asepsis was not known, and many of us older practitioners remember the time when we examined a puerperal patient without being sure we were surgically clean, or even a preliminary washing of hands.

It is my opinion that in ninety per cent. of the cases of uterine sepsis of the present day, the cause is putrid infection from matter left in the cavity of the uterus, either membrane or

clot, or some other substance, and that the other ten per cent. may be caused by the introduction of pathogenic organisms from without.

Before going into the matter further, however, let me consider the blood supply, and more especially the lymphatic circulation of the uterus and the broad ligaments. The blood supply is brought to the uterus by the uterine and ovarian arteries which anastomose at the sides of the organ, the circulation proceeding from the uterine artery up to the ovarian, thus explaining the reason that one clamp is sufficient in performing vaginal hysterectomy, where one is working from below, whereas two are required for the ovarian artery when working from above. The venous supply of the pelvis consists of many anastomosing plexuses, such as the vesical, uterine and ovarian. The uterine plexus opens into the ovarian veins, the right ovarian vein passes to the inferior cava, whilst the left passes to the renal vein. But it is to the lymph supply I would especially direct your attention, for it is the lymph vessels which are directly affected in uterine sepsis, and are the cause of all our troubles. The lymphatic supply of the uterus consists of a large, fine net-work of vessels encircling the uterus, and passing along the broad ligaments, accompanying those from the ovaries and tubes, reaching the lumbar glands. The lymphatic of the round ligaments empty themselves into the inguinal glands, the bladder lymphatics and those of the upper three-fourths of the vagina open into the iliac glands, whilst those of the external genitals and lower vaginal fourth empty into the oblique inguinal glands.

Having thus cleared the way anatomically, let me, in a few words consider the bacteriology of pelvic inflammations. The organisms met with are the streptococcus, staphylococcus, tubercle bacillus, gonococcus, *B. coli commune*, typhoid bacillus, and the bacillus aerogenes capsulatus, the latter being found in the blood vessels of the uterus, particularly after putrid infection. As we are only concerned with the organisms which are the result of acute puerperal sepsis, we will keep our attention fixed on the streptococcus, the staphylococcus, the gonococcus, and the *B. coli commune*; the others may be dismissed for the present, as the typhoid and tubercle bacillus are merely incidental, and the life history of the *B. aerogenes capsulatus*, and its relation to pelvic disease has not been worked out. Now, the pus forming organisms are the streptococcus and the gonococcus. The staphylococcus induces an outpouring of lymph and serum, the *B. coli commune* of serum alone;

hence the streptococcus infection may well be termed virulent, the staphylococcus beneficent, as, by the outpouring of lymph, sources of infection become confined, and the *B. coli commune* innocent. But it is very common to have both streptococci and staphylococci present. In fact, in uterine sepsis the former is seldom found without the latter, but fortunately, the staphylococcus is frequently found without the streptococcus, and the result of this infection is found by abdominal surgeons, who, years afterwards, are compelled to operate for extensive pelvic adhesions, which bind uterus, tubes, ligaments, and ovaries into a hardly distinguishable mass. Considering first the pus forming organisms, the infection in each travels by a different route. The streptococcus causes an endometritis, a metritis, and then, passing outside the uterus, affects the rich network of lymphatic vessels around the organ, and extends over the broad ligaments, causing general lymphangitis of the pelvis. The gonococcus, on the other hand, passes directly into the fallopian tubes, and causes pyosalpinx. For some reason, although the gonococcus may cause endometritis, it seldom or never affects the uterine body itself, but proceeds directly into the tubes. Hence, in streptococcus infection, or what in the old days would have been called malignant puerperal septicæmia, we have present a profound inflammation of the lymphatics of the pelvis, a lymphangitis, which, if the poison is very active, or the dose very large, is followed by pelvic and general peritonitis, and causes death in three or four days, but, if the poison be not so profuse or active, results in pelvic abscess.

In this form of poison, tubal abscess and ovarian abscess are late occurrences, whereas, in gonococcus infection, tubal and ovarian abscess are early. In both forms of infection pelvic peritonitis occurs, but in streptococcus infection it is primary, and in gonococcus infection it is secondary; that is, in the latter instance, the order of events is acute salpingitis and extension of the inflammation through the fimbriated extremity to the peritoneum, whereas in the former the peritoneum is directly infected through the lymphatics. We meet, thus, two types of streptococcus infection, which depend simply on the dose and activity of the organisms, which may be named the fulminating and severe type. In the fulminating, the dose of streptococcus poison is excessive, the cocci themselves are active. the poison enters by the lymphatics, causing a lymphangitis, and through the venous sinuses causing

a thrombo-phlebitis, a possible endocarditis, and a fatal result is measured by hours, not days, as the citadel is carried by violent assault before the defending army have a chance of organising their forces. Fortunately, those cases are not very common, as, when they are met with, treatment, as a rule, is too late to be of any great avail. With the other type, the severe, the dose of the streptococcus is not so great, and the course of events is lymphangitis and pelvic abscess, and the future course is largely governed by the treatment adopted. In staphylococcus infection, as I have before mentioned, abundance of lymph is thrown out, and the process is one of Nature's methods of protection, for large adhesions are formed which tend to lock up effusions, which would otherwise prove infectious and harmful to the organs contained in the peritoneal cavity. But most frequently we meet with a mixed infection, both staphylococci and streptococci being present, and the course of events then depends upon which kind predominates. For instance, we may have an abundance of lymph thrown out forming adhesions which enclose an abscess, which, if left alone, may open into rectum, vagina, or abdominal wall, and recovery ensues with damaged pelvic organs, or, in the case of pure staphylococcus infection, simply a large mass of lymph thrown out, which results in adhesion of uterus, ligament, ovary, and bowel*.

It must not be forgotten that the gonococcus may lie latent in the parturient canal for months, only awaiting a favourable opportunity for its growth, and this particularly occurs after parturition or abortion, when there is a large raw surface exposed, and acute pyosalpinx occurs after a few days. I saw a case some years ago where this course of events occurred, which puzzled me at the time, where the patient developed an acute pyosalpinx a few days after labor, without any other pelvic trouble. The matter is explained now.

It is fitting that one should say a few words here on the treatment of uterine sepsis by injection of the antistreptococcus serum. The weak point about this is, that, even if it be granted that the serum has much effect on the streptococcus, the infection is usually of the mixed type, and, as we have several varieties of the staphylococcus and the streptococcus themselves, the serum may hit one kind, and

leave the others to go gaily careering on their way, and another weak point is that most valuable time is being lost while we are making up our minds that in any particular case the serum is doing any good at all, and, if any disease requires prompt and courageous treatment, or, as Pryor calls it, "aggressive treatment," it is uterine sepsis.

To sum up, let us keep fixed in our minds the following facts:—That

1st.—The gonococcus affects the tubes, and through them, the peritoneum.

2nd.—The streptococcus affects the uterine and broad ligament lymphatics, and, in severe cases, the veins and sinuses.

3rd.—The foregoing are the pus-producing organisms.

4th.—The staphylococcus is not a pus-producing organism, *per se*, but induces a lymphangitis, resulting in a large outpouring of lymph and serum.

5th.—The staphylococcus is often accompanied by the streptococcus, causing a mixed infection and pus.

6th.—Both these organisms may be accompanied by others, such as the gonococcus, tubercle bacillus, and *B. coli commune*.

The *B. coli commune*, when the cause of uterine sepsis, induces a very mild inflammation resulting in the exudation of serum and small adhesions.

Having discussed so much of the bacteriology of sepsis proper, let me now turn to the consideration of the so-called sapræmia, which is better named putrid infection. When a piece of membrane, a piece of placenta, or a polyp decomposes in utero, what is the state of affairs? Here we have superficially the gradually decomposing mass, crowded, and alive with all kinds of bacteria, pathogenic and otherwise, fighting to obtain entrance into the general circulation; beneath the mass are layer upon layer of leucocytes, opposing their entrance, thrown out by the already inflamed endometrium, or raw surface of the uterine tissue itself, lying underneath. If the putrid mass is loose enough to come away from the uterine wall, and is expelled by uterine contractions, the bacteria are expelled with it, the leucocytes, having done their duty, are absorbed, and the patient is practically well next day; but if the leucocytes are unable to withstand the pathogenic bacteria, and they obtain entrance into the lymphatics, we have much the same course of events as in the other forms of uterine sepsis, or if, as is much more common, a rough curettage with a sharp curette is performed, what follows? The curette scrapes

* There seems to be a difference of opinion about the pus-forming capabilities of the staphylococcus. On the one hand we have experts who tell us that a pure culture of staphylococcus injected under the skin will cause abscess in the course of a few days, while Pryor dogmatically states that he does not believe that staphylococcus ever causes pus in the pelvis.

away not only the offending mass, but also the defending leucocytes, and a great deal of healthy and unhealthy endometrium, leaving a raw surface for the already active bacteria to continue their assaults upon; and how many cases have we seen when, after curettage under those circumstances, the result has been that, in two or three days a severe attack of what is known popularly as pelvic cellulitis occurs. Now, what has happened is simply this: The curettage has opened a way for all pathogenic bacteria to gain an entrance to the lymphatics, and the pelvic cellulitis is nothing more or less than an acute lymphangitis. In fact, pelvic cellulitis is a misnomer. There is no such thing pathologically, the true state is a lymphangitis with large outpourings of serum, lymph, or pus in the layers of the broad ligaments, or, as more frequently happens, in the lymph tubes themselves. Here we have exactly the same course of events as described previously, the only difference being that in the one case we may possibly get a pure staphylococcus or streptococcus invasion, whereas in the other the infection is mixed, all kinds of pathogenic bacteria gaining admission, but in this latter case of putrid infection Nature has a certain amount of time to resist the invader, and so, as a rule, the ultimate results are not so serious. In abortion the amount of infection is proportionate to the length of the pregnancy; thus infection in the first month or six weeks takes on more of the character of an endometritis, and after the third month the amount of raw surface being so much greater, the invasion extends over a larger area, and lymphatic infection is ever so much more probable and extensive. The various types of puerperal sepsis then depend on several factors, the amount and bacteriological character of the infection, the extent of raw surface through which the organisms effect an entrance, and the amount of lymphangitis caused. Having thus discussed the pathology, I think we may take it as proven that the so-called puerperal fever is a local disease, and must be treated locally; and in discussing the treatment and management of such cases, I must here express the obligation we owe, as medical men and surgeons, to Professor Pryor, of New York, for it is to him that a great deal of the knowledge of the management of this disease is due, and the cul-de-sac operation to be presently described is best known throughout America as Pryor's operation. Anyone interested in this class of work will find his book on "Pelvic Inflammation" a veritable mine of information, which will be read and re-read with much profit.

Before commencing the treatment, it will be well to mention a few of the more serious complications which arise as a direct result of the septic poison. The kidneys, in every severe case of streptococcus infection, are found affected. In any true case, albuminuria occurs within forty-eight hours, and shows a profound degree of intoxication. Endocardial affections are not uncommon, and pleuritis and pneumonia are not rare. In fact, it is seldom that a case of purulent peritonitis recovers without some grave complication.

Treatment.—Puerperal sepsis, or rather uterine sepsis, as I have tried to prove, results in acute pelvic inflammation, and, as this is a surgical disease, it must be treated surgically.

Of one hundred women who develop a temperature after parturition, at least sixty-five will get well without any treatment whatever. The fever subsides after a day or two, and no bad results are felt. Of the other thirty-five, however, a few will die, and the remainder arise from bed after a more or less prolonged recovery, with more or less damaged pelvic organs, with adhesions, or possibly locked-up pus. A woman who has had a tedious convalescence after uterine infection, accompanied by fever, has before her all her life the possibility of an operation, for the probabilities of chronic pelvic trouble are great, and one never knows when she is going to have an acute exacerbation of symptoms. It is thus absolutely necessary that one should have clear ideas of how to combat the disease, not only to save life, but to prevent the occurrence of chronic pelvic trouble.

To take the treatment of abortion first. In the earlier months of pregnancy it is difficult to get the uterus emptied of all its contents, separation of the placenta and membranes is very slow, and the danger of infection from putrid matter great. When any of us are placed face to face with a case of abortion with a stinking discharge, our anxiety is great until everything noxious is expelled, and the uterus clean again.

In abortion, so long as fever is absent, the less active interference there is with the uterine contents the better for the patient. Even though the discharge may be extremely unpleasant, so long as fever remains absent, cleanliness and vaginal douching are all that are required, for opportunity is then given for separation to take place, and the offending mass to be expelled. The treatment of abortion may be divided into various heads, according to the symptoms present, viz.:—

1. Flooding.

2. Retained placenta or membranes without fœtor.
3. Retained placenta or membranes with fœtor, and moderate fever of under thirty-six hours' duration.
5. Retained placenta or membranes, with high fever of thirty-six hours' duration and over.

In all methods of treatment let me insist upon one golden rule, namely, strict asepsis. The antisepsis can take care of itself. No treatment will be successful or satisfactory if this be neglected.

The treatment of flooding may be dismissed in a few words. Irrigation of the vagina by means of a clean syringe and normal salt solution—about a heaped teaspoonful of table salt to a quart of warm boiled water, is the proportion—and, as it is bland and unirritating, it is preferable to an antiseptic solution hurriedly prepared, of unknown strength, and then plugging with clean cotton wool. The plugs ought to be removed in from twelve to sixteen hours, another saline douche given, and, if hæmorrhage has been controlled, nothing more need be done for the time being. It must be borne in mind that a severe flooding conduces to sepsis, owing, doubtless, to the decreased resisting power of the leucocytes, so that, in all cases of large hæmorrhage, one ought to be, if possible, more careful regarding the aseptic management of the patient.

When membrane or placenta are retained without fœtor a policy of inactivity is best. We know not if the ovum be alive or dead; we must wait; but when a woman, after flooding, suffers from a discharge that shows that decomposition is taking place in utero, our anxiety begins. As long as fever is absent, irrigate the vagina with either normal salt solution, or 1 in 4,000 corrosive sublimate solution, or the Thiersch solution. The latter consists of boric acid crystals, 12 parts; salicylic acid crystals, 2 parts; water, 1,000 parts. Take the temperature twice daily, and wait. By waiting we attain two objects, namely, dilatation of the cervical canal, and separation of the offending material. If, however, the temperature rises over 100°, more decided steps must be taken, and further delay is not advisable. The canal must be dilated if necessary after vaginal douching, the cavity of the uterus douched, a gentle curettage with a blunt instrument performed, the uterus again irrigated and filled with ten per cent. iodoform gauze, and the vagina loosely packed with the same. It is imperative that the curettage be not vigorous. It is better to leave some debris

behind than to scrape away endometrium and leave a raw surface for the germs to penetrate easily. The iodoform gauze can be removed in twenty-four, thirty-six, or forty-eight hours, or longer, according to circumstances. If the temperature comes down to nearly normal, the gauze can be safely left for three or four days.

Here let me say that in my opinion, curettage is far too frequently performed. It is looked on as an operation free from danger, is easily performed, and is consequently in high favour; but from what I have previously written you will readily understand the risks it entails. An ideal curettage for decomposing debris is one which, whilst it removes offending material, leaves the underlying endometrium unscratched and unharmed; but, although this ideal is almost impossible to carry out, still our aim ought to be to imitate it as far as we can.

If the temperature keeps up after twenty-four or thirty-six hours to 101° and the pulse keeps fairly low, 100 to 108, the gauze packing must be removed, another douche uterine and vaginal given, another gentle attempt made to remove any more debris that may be loose, and fresh packs introduced, but, should the temperature rise to 102° or 103°, with a pulse running to 120 or over, it is an undoubted sign of a profound degree of septic poisoning. Here we do not know how far the poison has invaded the uterine structure, how far or how much the lymphatics are affected. The pulse here gives us valuable information. Any case that gives a fairly low pulse rate, with even a temperature of up to 102°, although causing anxiety in our minds, does not point to a severe sepsis, but a quick frequent pulse running to 120 or over, with the same temperature, indicates a profound degree. In those cases immediate action is necessary, and delay, as a rule, will result in lamentable consequences. Here we have a case, which, a few days after the occurrence of an offensive discharge, presents the following train of symptoms:—A quick pulse of 120 or 130; a temperature of 102° or 103°; gentle curettage and packing have been adopted without amelioration; the usual symptoms of fever are present, thirst, dry skin, foul tongue, etc.; the evacuations have been attended to presumably; there is some tenderness over the region of the uterus abdominally; and, generally speaking, the patient's condition is causing us great anxiety. Now, what has occurred is this: The pathogenic bacteria have passed the endometrium, and are causing metritis. The question arises, "have the uterine lymphatics yet become affected?" We cannot tell, but, as Pryor says, we must get in front of the

invading army. There is a battle royal going on between the pathogenic organisms and the leucocytes, and into this conflict we must enter vigorously, or else look on at the fray apathetically giving drugs which may do harm, but will certainly do no good. The lines of treatment here must be clearly laid down.

Ether must be administered, and, if there are degrees in asepsis, the highest must be here maintained. If any dressings have been previously used, they must be removed, thorough uterine and vaginal douching with salt solution employed, the patient being in the lithotomy position, and a thorough curettage performed carefully with a moderately sharp instrument. Every corner of the uterus must be cleaned out, then another uterine douche and uterine packing with 10 per cent. iodoform gauze. Now we have cut off all foci of fresh infection, but we have to attack the enemy in the rear, and treat the inflamed lymphatics external to the uterus. Here it is that Pryor's cul-de-sac operation is so valuable.

The instruments required for this operation are:—A Sims speculum or perineal retractor, a vulsellum, a pair of blunt-pointed scissors, preferably curved on the flat, and a pair of dissecting forceps.

The perinæum being retracted, the anterior or both lips of the cervix uteri are caught by the vulsellum, and drawn downwards. On pushing up the cervix again with the vulsellum, a puckering of the vaginal mucous membrane is noticed at the back of the cervix about one half to one-fourth of an inch superior to the external os. This marks the junction of vagina and cervix, and it is here that one makes the incision. Should one incise much higher up, there is danger of wounding the rectum. The posterior lip is now caught by the vulsellum, and the uterus drawn downwards and forwards, and with a succession of snips the incision is made through the junction of the vaginal and cervical mucous membrane to the extent of an inch from side to side. When making the incision, it is well to direct the scissors as if one was about to cut the cervix itself. As soon as the incision is made, the forefinger of the left hand is pushed through into the peritoneal cavity, but, should any difficulty be experienced in doing this, the peritoneum should be caught with dressing forceps, and the point of the scissors pushed through. Then both forefingers are placed in the opening, and the incision stretched from side to side of the cervix. If the high fever has been of some days' standing, a copious flow of serum escapes. Then, remembering that one

is at the posterior part of the broad ligaments, the uterus being still held down, the finger is swept over and behind the uterus, any broad ligament adhesions broken down, and the pelvis filled with strips of iodoform gauze. The strips measure about four inches wide by a yard long. Two such strips are, as a rule, sufficient, care being taken that the ends are left long enough to ensure easy removal; the vagina is then packed with the same material, and the operation is, so far, over.

If, under the ether, the patient's pulse runs to 140, venous infusion is indicated; one or two quarts of normal salt solution has a wonderful effect. I have seen a case where a pulse of 160 was brought down to 110 in twenty minutes by this means. The next day the dressings and the drawsheet will be found soaked with the toxin-laden serum. In three days the vaginal dressing is removed, and fresh dressing packed in. On the fifth all dressings are removed, and, if the septic symptoms still continue, are replaced. If the sepsis seems to have disappeared, the uterine dressing is removed, and gradually smaller dressings are inserted into the cul-de-sac until healing takes place.

I saw a very instructive case some little time ago. The patient was over a week confined, had been feverish for five days, her temperature at the time of opening the cul-de-sac was 106°. As soon as the sac was opened a large amount of serum, with flakes of lymph, escaped. A large dressing was inserted. Next morning the bed was saturated with the discharge, but the temperature was 99°.

Regarding the treatment of uterine sepsis, not the result of putrid infection, the principles are much the same. In sepsis after labour at full term there is a large, raw surface exposed, which will readily absorb any bacteria introduced. Our main difficulty in these cases is to decide whether the poison has penetrated the uterine substance, or whether the condition is one simply of inflammation of the uterine interior. As, in a case of the kind, the cervical canal is widely open, on the first serious rise of temperature, the patient should be placed in the lithotomy position, the vagina thoroughly cleansed, the uterine cavity douched with several pints of Thiersch or salt solution, and the cavity packed with iodoform gauze, and this operation repeated in twelve to twenty-four hours. If the symptoms subside, the gauze may be safely left for three days, but, if the serious symptoms persist, the cul-de-sac operation is indicated.

Opium should under no circumstances be administered in pelvic sepsis. It locks up the bowels, gives us a false sense of security,

disguises pain, induces abdominal distension, and renders anything like accurate diagnosis impossible. Purgatives are not necessary. Too much purgation in those cases, or, indeed, in any abdominal case, is as bad as opium. A daily evacuation is all that is necessary. Should the pulse show signs of failing, strychnine may be used hypodermically, but in any case of alarming heart failure, the sure remedy is venous infusion. I have operated and infused lately with the happiest results, and so convinced am I of the efficacy of the treatment, of the great improvement this treatment is on the old plan of watching, and opium, and quinine, and port wine, that I feel it incumbent on me to bring it under the notice of the members of the Branch. The operation is easily done, and, with ordinary care, devoid of danger; but beware of delay. Some bad cases will recover without operation, doubtless, but the earlier toxins are diverted out of the pelvis, the sooner will the pelvic organs recover their normal condition.

(Read at the last meeting of the Queensland Branch of the British Medical Association).

PREGNANCY IN A DOUBLE UTERUS— REMOVAL OF PREGNANT PORTION.

By M. Jay, M.R.C.S., Adelaide.

Mrs. K., aged 25 years, has been married three years; one child two years old; confinement natural, nothing abnormal noticed by medical man in attendance, miscarriage seven months after. Neither before nor after marriage was there any dysmenorrhœa or abnormal menstruation.

She first consulted me in September, 1901, complaining of backache, lassitude, and a vaginal discharge, which commenced after her miscarriage a few months previously. On examination, there was some erosion of the os, the uterus was enlarged, retroverted, and pushed over to the right; an ill-defined swelling to be felt in left broad ligament. I sent her into private hospital, and on September 5th examined her under an anæsthetic, and at the same time curetted the uterus. The swelling on the left appeared to spring direct from the left uterine wall, and was solid in character; left ovary and tube not to be felt. I told her she would have to undergo an operation to rectify the position of the womb, and at the same time examine the growth, with a view to removal, if thought necessary.

Shortly afterwards she saw Dr. J. A. G. Hamilton, who gave her similar advice, without forming any definite opinion as to the character and origin of the growth. In November she became pregnant, and the operation was postponed. In December she began to suffer from uterine hæmorrhage, recurring daily, and after three weeks the discharge became slightly offensive, and dirty brown in colour. On the 30th of January I again sent her into hospital, and curetted the womb. I found the uterus enlarged, and pushed still more to the right, containing nothing but a little, broken-down blood-clot; the tumour on the left had considerably enlarged. After the curetting, the discharge completely ceased, and she appeared quite well, except for persistent sickness, which would not give way to any of the ordinary remedies. She went home for one week, and returned on February 17th, when, with the assistance of Drs. Ewbank and Hayward, I operated upon her.

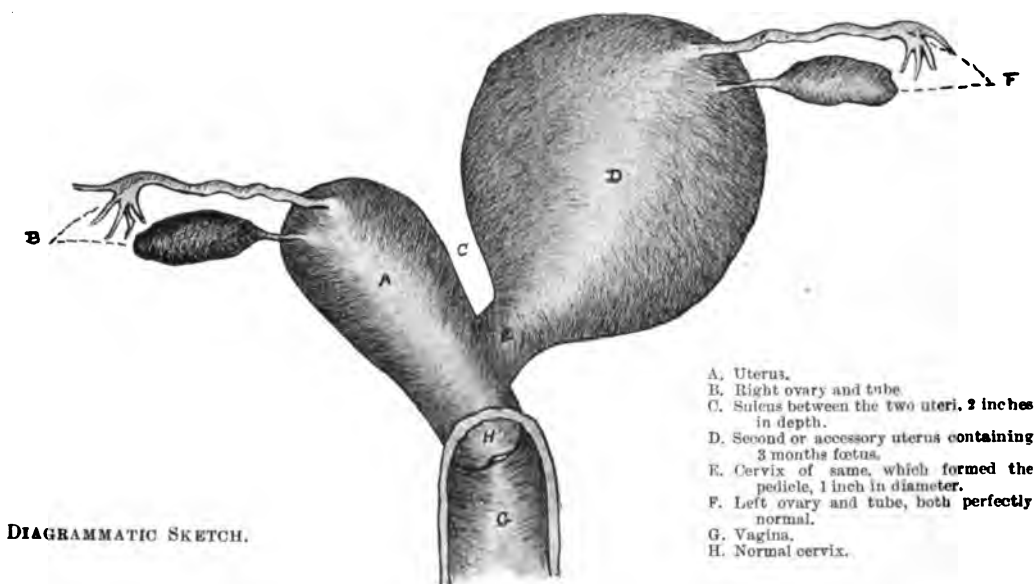
On opening the abdomen, a swelling presented itself to the left of the middle line, resembling an ordinary pregnant uterus, but on searching to the right the uterus was brought into view, with, however, only one tube and ovary (the right) attached, both normal; the left tube and ovary, also both perfectly normal, were found to spring from the left side of the tumour. There was a distance of two inches from the fundus of the uterus to the point where the tumour was attached to the uterine wall. Having placed the patient in the Trendelenburg position, I tied the left ovarian artery, and opened the layers of the broad ligament; then enucleated the tumour, until I thoroughly exposed the uterine artery entering it below. This was carefully tied, and the tumour, after further enucleation, was found springing from the uterus, at the junction of the cervix with the body by a pedicle an inch in diameter. This was transfixed and tied, and the tumour removed, making a sleeve which was afterwards brought over the surface of the stump. On cutting through the pedicle, which in every respect resembled an ordinary cervix, a small opening was exposed in the tumour, from which a thick plug of mucus exuded, and similar mucus was filling an opening in the stump, which evidently led into the uterine cavity, but was now, of course, tied off. This was scraped away, and the stump covered. The wound was washed out with hot saline, and the cut edges of the broad ligament carefully sutured with catgut, so that the pedicle of the tumour was entirely extraperitoneal. The uterus, which presented a curious, lopsided

appearance, with its one tube and ovary only, was then fixed to the parietal peritoneum in the ordinary way, and the wound closed.

On opening the tumour, which has been exhibited to you this evening, we found a three-months foetus, and, as you have seen, the specimen is purely a pregnant uterus, removed at the cervix, and having only one tube and ovary.

Before making any remarks upon the case, I might say that the patient made an uninterrupted recovery, and on examination the uterus is found firmly suspended to the abdominal wall, and a small notch can be felt through the left wall of the vagina, corresponding with the seat of the pedicle.

This case differs from any of the ordinary forms of uterus bicornis duplex. Here the Mullerian ducts have been separated from one another in that portion of their course, which would correspond with the body of the uterus, so that the organ at its upper end is divided into two parts, but in almost all the cases recorded there is merely a partition between the two cavities, while here we have two entirely distinct and separated bodies, each corresponding in every respect to a normal uterus. Below the Mullerian ducts have been fused together in the ordinary way, forming a single cervix. This condition would correspond more closely with the uterus bicornis unicollis or semi-duplex than with any other, though one would almost be



disposed to class it as a case of "pedunculated accessory uterus." The diagram attached will give you a clearer idea of the condition present than any description I can offer you.

My reason in reporting the case is on account of the unusual and abnormal development, and the fact that it was possible to remove a pregnant uterus, and yet leave behind another uterus in a practically normal condition, excepting, of course, that only one tube and ovary were attached to it. Though this, of course, might easily be done in cases of didelphic uterus, where there are two entirely separate uteri, each cervix generally opening into a separate vagina. Another peculiarity was the absence of the dense band of fibrous tissue, which is almost invariably found in these cases crossing the top of the uterus at its

bifurcation, stretching from the bladder to the rectum, and generally spoken of as the vesico-rectal ligament. This ligament is an important factor, when well-developed, in preventing the straightening of the pregnant portion.

It is difficult to say what would have resulted had this case been allowed to go on to full term. Probably the unimpregnated uterus would have been pushed on one side, and as pregnancy advanced, the pregnant portion would, in the absence of the vesico-rectal ligament, have straightened itself so that what corresponded with its os would have so arranged itself as to be in a straight line above the normal cervix. Even had this been the condition, the case would probably have presented very grave difficulties at the time of delivery.

THE TREATMENT OF PUERPERAL ECLAMPSIA.

By G. Cuseaden, L.R.C.P. *et S.*, Edin., Hon. Obstetric Surgeon, Women's Hospital, Melbourne.

IN a large maternity hospital, such as the Women's, I have had ample opportunities of watching the progress of cases of eclampsia, and a few notes will, I feel sure, interest you. Puerperal eclampsia appears suddenly in a woman, before, during, or after labor. It rarely develops after labor later than the second or third day, and in pregnancy it never develops before the fourth month. It is met with once in from 350 to 500 cases, and is more frequent between the ages of 20 and 30 years. According to Dührssen, in 93 per cent. of cases the convulsions cease after delivery, and it is stated that in a little over 1 per cent. of the cases of albuminuria of pregnancy, eclampsia will follow. There are numerous predisposing causes of this disease, the great majority of cases occurring in primipara. Bidder states 74.3 per cent were first labors. The explanation of this preponderance of the affection in primigravidae is the occurrence of conditions that are not, as a rule, in multipara, namely, malpositions, excessive coitus, tight lacing, rigid abdominal walls, heredity to kidney disease, multiple pregnancy, causing an excessive amount of excrementitious matter in the blood requiring elimination. In Oldshausen's statistics, 16 out of 200 gave birth to twins. Lever's theory was that of the existence of an uræmia, caused by the pressure of the gravid uterus on the renal vessels. It has been clearly proved that uræa, as such, does not exist in the blood in this disease.

Kedarnatti has suggested that it might result in an outward displacement of the kidney and elongation of the renal vessels, with consequent obstruction to the flow of blood. Tyler-Smith's theory was that the albuminuria was a direct outcome of a sympathetic irritation of the kidneys due to reflex action—Halbertsma's theory. He attributes the condition to compression of the ureters by the gravid uterus. Stumpf believes that in some cases under abnormal decomposition a non-nitrogenous substance, probably acetone, is produced, and this in its elimination causes irritation. Herrgott advocates the microbial theory. Dührssen finds the cause of eclampsia in the retention of creatin and creatinin in the kidneys. The creatin and creatinin accumulate in the vessels of the cerebral cortex, causing convulsions and coma. W. W. Potter says it

depends upon toxemia, due to over-production of toxins and under-elimination by the emunctories. These toxins probably have their origin in the ingesta in intestinal putrefaction, in foetal metabolism, one or all, and there is co-existing impairment or suspension of elimination. All the modern theories are based on the presence, in the blood, of some noxious element, that is responsible for the eclamptic fit. Frerichs suggested that the condition was one of ammoniemia, that is, the existence in the blood of large quantities of ammonium carbonate resulting from a decomposition of the urea; this theory has been proved to be false. The foetal theory attributes the entire trouble to previous disease or death of the fetus. It is claimed that the convulsions were a direct result of a cerebral anæmia, with more or less serous effusion into the tissues of the brain, the condition being an immediate outcome of the hydræmia of pregnancy.

It is at present generally conceded by obstetric authorities, who have studied the subject, that the direct cause of puerperal eclampsia is the presence in the blood of an excessive amount of effete matter, probably creatin or creatinin, derived from both mother and child, but largely from the latter, and which failing to be eliminated by the kidneys, induces a general vasomotor contraction of the arterioles of the body, as well as the base of the brain.

Amongst the exciting causes may be mentioned acute nephritis, pressure by the gravid uterus, profound emotion. There are two distinct types, the plethoric and anæmic. The former is full blooded, with a forcible pulse; the latter is pale and feeble, with headache, rapid and weak pulse.

Coming now to the treatment. The treatment includes prophylaxis, the treatment of the paroxysms, and the treatment during the intervals and after treatment.

The prophylactic measures consist in supervision of the urine and the emunctory organs generally. Upon the appearance of albuminuria, steps should be taken to arrest the progress of the disease. A healthy action of the skin may be secured by massage; hot baths and exercise; the anæmia by giving iron; diuretics and laxatives to be employed; mental excitement to be avoided; the diet must consist exclusively of milk; water, as much as two quarts, should be given daily.

I have had excellent results from blood-letting in plethoric cases. Chloroform is given to control the paroxysm; injection of saline solution, croton oil in from 1 to 3 drops,

morphine $\frac{1}{2}$ -gr., repeated until as much as 7 gr. are given. Veit claims good results in glycerine, hot bath 110° to 112° F., or hot wet pack. Duer's method for producing rapid diaphoresis, when other methods have failed, is to pour two ounces of alcohol upon a very hot brick; this is then wrapped in flannel and applied to the patient's feet (Charpentier) to reduce the nervous irritability; give 30 to 60 gr. of chloral hydrate per rectum; pot. bromid. 30 gr. may be similarly employed.

Veratrum viride has a great reputation of late. I have tried it with some success; it reduces the tension in pulse. Eclampsia is the expression of a further maternal intolerance of the fetus, hence as a primal measure the uterus should be speedily emptied of its contents. Winckel employs 1 to 2 gr. of chloral per rectum, repeating the dose after each attack until 12 gr. are administered in the twenty-four hours. Pilocarpin, as a remedy, is condemned by Brown, Fordyce, Barker and Winkel. Cæsarean section is recommended by Halbertsma. Haultain recommends the induction of premature labor by dilating the cervix with the fingers, morphia and morphine hypodermically.

The unfavourable symptoms are frequent convulsions, high temperature, extremely rapid and small pulse, urinary suppression. I may mention that the amount of albumin does not bear any relationship to the gravity of the case.

[Read at the April meeting of the Victorian Branch of the British Medical Association].

GLIOMA OF RETINA.—A REMARKABLE FAMILY HISTORY.

By R Earle Newton, M.B., C.M. F.R.C.S. Eng.,
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Professor of Surgery, Glasgow; Perth,
W.A.

It seems to be generally considered, judging by the remarks on the subject in the various books on ophthalmology, that the hereditary factor does not enter largely, or even at all, into the production of glioma of the retina, many authors being content with the statement that there does not appear to be any hereditary tendency. Juler, however, makes the statement that "Heredity appears to play an important rôle in the existence of these tumours," and that two or more children of the same parents may suffer. Berry also remarks that several members of one family may be affected. Noyes states that several members of one family have been known to have been

affected, and quotes a case reported by Wilson in which eight members of one family were attacked by the disease. Bland-Sutton, in his well-known work on "Tumours," says:—"In regard to the question whether 'glioma' may 'run' in a family, there is little evidence to guide us. Fuchs has recorded a case where two children were affected in one family, but all ophthalmologists agree that it is an extremely rare event."

The following case is, I therefore think, worth recording, ten members of one family having been the subjects of the disease.

G.W., a little girl aged two years, was brought to me by her mother, who wished for advice as to the advisability of enucleation of both eyeballs for glioma. The mother believed that the child had been blind for fully twelve months, as nothing seemed to attract her visually, although she readily appreciated sounds, and appeared otherwise to be intelligent. When seen by me she was completely blind, the perception of light being entirely absent. Both pupils were occupied by a mass which completely involved the lens, and was growing forward into the anterior chamber. The anterior chambers were very shallow on both sides, the irides being pushed markedly forwards. The growths had a nodular, grey appearance, the left one being slightly yellowish. On both sides the intra-ocular tension was very greatly increased, the globes feeling almost like balls of wood, especially the left one. She was apparently suffering intense pain, as she frequently put her hands to her eyes, and constantly rocked her body from side to side, giving vent to a continuous moan, broken only by an occasional scream. There were no evidences of secondary implication of the brain or other organs. Operation was refused, as a promise of cure could not be made, or indeed, scarcely entertained, owing to the advanced condition of the disease, and its bilateral nature.

The family history formed the most interesting feature in the case. The mother stated that the patient was the youngest of a family of sixteen children. Of these, two had died within a month or two of birth of bronchitis, four are still alive and well, and the remaining ten had all been affected by glioma of the retina, and all of them, except the present patient, were dead. None of the children lived beyond three years, except one which was operated on for unilateral growth, and which lived to five years, dying of a recurrence locally. In the only other one which underwent operation, the tumour recurred in a few weeks, and

was rapidly fatal. Of the ten cases, only three, including the two operated on, were unilateral, and seven cases were bilateral, giving a percentage of 70 of bilateral cases. This is interesting, as the percentage of bilateral cases is usually given as about 20. Of the seven children who died without operation, the eyeballs ruptured in every case except one, which was bilateral, and this child was said (by the medical attendant), to have died of cerebral implication. Five cases were males and five females. One of the father's brothers was said to have died in infancy of some eye complaint, the nature of which cannot be determined.

The accompanying rough drawings were made after death from cases Nos. 11 and 14. In No. 11 the growths have on each side extended up under the skin on the forehead, probably extending in the pericranium of the frontal bone.



FIG. I.

The following table gives a brief history of the individual members of the family :—

1. Male. Died at six weeks of bronchitis.
2. Male. Alive and healthy, 25 years of age.
3. Female. Alive, but delicate, 23 years of age.
4. Male. Glioma of right retina, enucleation at 2½ years, local recurrence in a few weeks, died at 3 years.
5. Female. Glioma, bilateral, ruptured, died at about three years.
6. Female. Alive and healthy, 19 years of age.



FIG. II.

7. Female. Glioma of left retina, ruptured, died at 2 years.
8. Male. Glioma, bilateral, ruptured, died at 3 years.
9. Male. Glioma, right retina, enucleation at 3 years and 9 months, death at 5 years from recurrence locally.
10. Male. Died at 9 months of bronchitis.
11. Male. Glioma, bilateral, ruptured, died at 3 years. Represented in drawing No. I.
12. Male. Glioma, bilateral, unruptured, died at 2½ years from cerebral implication.
13. Male. Alive and healthy, 8 years of age.
14. Female. Glioma, bilateral, ruptured, died at 3 years. Drawing No. II.
15. Female. Glioma, bilateral, ruptured, died at 3 years.
16. Female. Glioma, present case.

THE RATIONAL METHOD OF SEWAGE DISPOSAL.

By T. Mailler Kendall, L.R.C.P., L.R.C.S.,
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(Introductory Address to a Discussion at the Inter-colonial Medical Congress at Hobart.)

MAN, while following the paths of civilisation, has unwittingly originated many diseases as the inevitable concomitants of the aggregation of communities, and the extension of those industries which are a source of wealth to a nation. It is highly probable that many of these diseases might have been easily avoided, if only a small amount of common-sense had been exhibited in the past; but, owing to

prejudice, ignorance and apathy, they have been allowed to maintain their position and to exercise their influence on the physique of succeeding generations. It is only during recent years that we are beginning to appreciate the teachings of nature, and to understand the jurisprudence of self-preservation. From a sanitary point of view, the decentralisation of any industry would be most beneficial to a community, and if we compare the mortality occurring among the industrial population, which produces the national wealth, with the mortality occurring among the agricultural population of any country, it at once becomes apparent that our vast national accumulations have to be paid for by a frightful shortening and sacrifice of human life. It is the province of the sanitarian, and the aim of sanitary legislation, to minimise the evil which is undermining the vitality of the nation, and, as it is impracticable to decentralise industries, so to rid man of the waste products of his vital action and those impurities due to trade wastes, that the atmosphere in which he lives may become thoroughly oxygenated and renovated. If the lower forms of animal life are kept continually surrounded with the waste products of their being, they soon waste and die. Man not only has to deal with the waste products of his being, but also with those impurities which result from the wastes occurring during the processes necessary for properly carrying on any industry. It follows, therefore, that the preservation of the health of man depends upon the hygienic improvement of his environment, and upon the safe and speedy removal of the waste products of his vital action.

Sewage is a highly complex liquid, which is variable in its strength and composition. It consists of excretory substances, household wastes, vegetable refuse, soap, rainwater, grit, detritus, the liquid resulting from street cleansing, and the waste products from the various trade industries. The sewage of to-day is not the same as that with which the Health Commissioners of the time of Henry VIII., or even later, had to deal. Sewers are no longer elongated cess-pools, which were dependent for their cleansing on the amount of rainfall; and the sewage which they convey is no longer concentrated putrid refuse, but is so diluted with water that it flows freely along the channels provided. The great point to be considered in dealing with sewage is how this complex matter, which is capable of giving great offence and of causing much disaster, may be so purified by the action of the beneficent forces of nature, that it may assume its

proper position in the economy of life, and become a powerful fertiliser of the soil, without in any way menacing the health and life of man himself. When the physical organisation has to develop into maturity under unhealthy conditions, such as bad air, impure water, etc., it will be a degenerate product, for unhealthy conditions lead to bodily degeneration, and bodily degeneration has a tendency to produce mental degeneration. To prevent epidemics of disease it is necessary to promote the due observance of the laws of health, and in all matters of hygiene we must act upon the principle that the only way to get rid of epidemics of disease is to remove those conditions which produce them. From all the foregoing it will be seen that the purification of sewage is very important, and that it is also very important to direct its disposal, so that the soil may remain unpolluted, for a polluted soil may contaminate a water supply, and thus produce a state of affairs detrimental to the health of man, by impairing or destroying the health-giving properties of a most valuable adjunct of life. "National health is national wealth." The direct nuisance produced by sewage is usually the development of organisms fed by organic matter; and it is less important to remove these organisms than to remove their pabulum, contained in the sewage itself. The improvement, therefore, of the environment of these organisms by purification of sewage implies their destruction.

In all towns adjacent to the sea or ocean, it has been the acknowledged practice to convey sewage matter thither, so that it will be broken up and disposed of by the action of the waves. It has been found, however, that sea-water delays the oxidation of the organic matter in sewage, so that its foul constituents are preserved and washed back upon the adjacent foreshores, where it may accumulate in sufficient quantities to form dangerous deposits, which will be so influenced by the quickening action of the summer sun that gases injurious to health will be evolved. Tidal estuaries also do not allow sewage to travel to a sufficient distance out into the sea away from the shore. It is evident, therefore, that although disposal of sewage into the sea may be ready and appear to be economical, still the result obtained is by no means perfect.

Another most unclean and dangerous practice is the turning of the sewage of a city or town into the adjoining river, with the vain hope that during the progress of a long length of stream, purification would take place by means of sedimentation. This was a most

fallacious theory, and even minute quantities of sewage may, when introduced into a river stream, cause a vast and costly epidemic of disease in a city, town, or village, situated many miles lower down.

The Scriptural teaching that all refuse is to be buried in the soil, where it will be transformed into innocent substances, is undoubtedly a suitable method of sewage disposal in sparsely-populated districts, but it is altogether wholly impracticable in crowded towns or villages, as there is a difficulty in obtaining a sufficient area of suitable soil. If a soil becomes overloaded with refuse matter, purification does not take place, and thus the sewage is distributed in a dilute form by the underlying ground water, which may thus pollute a neighbouring water supply and cause foul emanations to be given off through the soil to the overlying atmosphere. A given area of land is supposed to be capable of dealing with the sewage of a given number of people, and to meet the difficulty of sewage disposal this theory was carried into practice, and it was considered wise to set apart a piece of land of such an area that it would be capable of dealing with the sewage of a certain population, and that in this area the actions of nature would be, as it were, under control. Such was the origin of the Sewage Farm.

At Botany, near the city of Sydney, N.S.W., the Sewage Farm comprises an area of seventy-one acres of land, which is composed of raw drift sand, which is useless for agricultural purposes except on that portion of the farm which has been in use for a number of years, and upon which fair crops can be grown if the sewage is applied to the land in a state in which it is capable of being assimilated by plant life. The sewage from the southern outfall passes to the screening chambers in the inlet house, where all the grosser particles—corks, etc.—are screened off, and the liquid sewage is allowed to pass on to the syphon well. The sludge thus intercepted is grabbed out of the various chambers and carried in railway trucks to the various irrigation beds, on which it is deposited. This method is undergoing modification, and in a short time the sludge will be forced across the river by a submarine line of ball and socket pipes. From the syphon well the sewage passes under the bed of Cook's River by a cast-iron inverted syphon, two feet nine inches in diameter, which is connected on the opposite side of the river with another well in the outlet house. From the outlet house the sewage flows along the main carrier, and is distributed during its course over the various

irrigation beds and settling tanks. The irrigation beds and settling tanks at the Botany Sewage Farm receive an average of 3,000,000 gallons of sewage daily, and they are worked alternately.

The cost of maintaining the Sewage Farm amounts to the sum of £2,257 4s. 4d. per annum, and the income realised by the sale of the produce and stock (products of the farm) amounts to £210 0s. 3d. The application of crude sewage to land has always been attended with difficulty, for it has a tendency to cake upon the surface of the soil, to prevent air getting at the roots of plants, and so to retard the ripening of the fruit and grain. The plan of treating sewage by land depends for its success upon the fostering of, and the increase of, those micro-organisms which are found in the upper layers of the soil, and upon that purifying action which these bacteria exert, during the slow passage downward through the soil of thin films of liquid, over surfaces exposed to the air which is lying in the interstices of the soil. This process of transforming sewage depends upon oxidation or nitrification, which is perfected by a fermentative action, promoted by these micro-organisms which were just alluded to.

The main idea of the establishment of a sewage farm is to have the treatment of sewage under control, but irrigation farms often create a nuisance at some time or other, and there is a sentimental objection to using anything produced on them. A very serious objection to a sewage farm is the difficulty of obtaining a sufficient area of suitable soil in a convenient situation. Unless there is sufficient acreage, this form of sewage treatment, which depends upon the surface soil for purification, will be seriously interfered with; and, as a sufficiency of acreage is very necessary to maintain the continuous aeration of the soil, an insufficient surface space will allow the sewage matter to cake on the surface, the soil to become choked and waterlogged, because the area provided is insufficient for the proper distribution of sewage. This is very important, for continuous and free aeration of the soil is needed to enable the micro-organisms to effect purification; and unless such a state obtains the air will be prevented from getting to the deeper layers of the soil, an effluent will be produced which lacks proper purification, and some of the raw sewage may escape or be discharged, unchanged in its composition. However porous a soil may be, a quantity of evil-smelling liquid rises into the air, and, however rapidly the sewage may sink into the earth, a certain portion must

escape by evaporation, and rise into the air before it has a chance of being purified.

According to Bailey Denton, "The treatment of sewage by intermittent downward filtration is the concentration of sewage at regular intervals on as few acres of land as will absorb and cleanse it without preventing the reproduction of vegetation." The efficient maintenance of such land, however, requires that the sewage shall be prepared by straining before it is sent on to the land, that the land shall be constantly aerated by being dug over and ploughed up, and that care shall be taken to deliver for surface irrigation only such quantities of sewage as are required by the cultivator. To attain this end we must take advantage of the power which land possesses of cleansing sewage by intermittent downward filtration. For the proper purification of sewage matter, it is most essential that bacteria shall be present to aid that process of nitrification which depends upon an organised ferment. In intermittent filters, the purification through these micro-organisms depends upon oxygen and time, which renders it necessary, therefore, that the surface of the filter shall be in no way clogged to the exclusion of the entrance of air in large quantities, for if the filter becomes impervious to air, the effluent gradually grows to contain as much organic matter as the crude sewage itself, or even more than it does.

Many years ago, Cagniard de la Tour recognised that the natural purification of organic matter in the soil was due to living organisms; and the labours of Pasteur, Frankland, Koch and others have demonstrated very clearly that the action of soil as a filter was not merely mechanical, but chemical. The biological condition of the soil is also, directly and indirectly, an important factor in determining the course of sewage purification. Man, however, with the solution of the difficulty of sewage disposal at his feet, sought how he might control the actions of nature, and introduced a system of chemical precipitation in order to get rid of the more solid portions of sewage. It is always very necessary to distinguish between the technical value of any data and their scientific function, and, consequently, although we may, and do, for the time being get rid of troublesome substances through the chemical precipitation of sewage, still we may, while so doing, overlook the scientific function of the precipitating agent. The chemical precipitation of sewage means the deposition of the insoluble matters which are in suspension in the sewage, together with a certain proportion of the organic matter

which is in solution. Solid compounds are formed through the action of the precipitating agent, which, in settling, drag down with them the suspended matter. Lime, which is most commonly used as a precipitating agent, has a solvent action on the suspended matter, and forms an insoluble carbonate of lime which acts as a weighting material, "entangling the flocculent masses in suspension, and carrying them down to the bottom of the tank" with it. When the tank effluent is run off, carbonic acid is given off and lime is deposited in the soil. "The addition of an excessive quantity of lime, while affording a rapid settlement of the sludge and a more or less clear effluent, dissolves a by no means inconsiderable quantity of the offensive matters previously in suspension, and thus it is apt to render the last state of the liquid worse than the first."

As mentioned before, the purifying action which takes place in sewage while passing through the soil depends upon the action of certain micro-organisms which are found in the upper layers of the soil, and, therefore, in all methods of sewage purification attention must be paid to this biological characteristic or to its evolutionary significance. The biological law of natural selection, which has a tendency to the extermination of the weak, is well demonstrated by the destructive action of the strong saprophytes upon pathogenic bacteria. In those methods of sewage purification in which a chemical agent is employed to institute precipitation, there is no bacterial action, the effluent produced is liable to a secondary decomposition, and the organic matter left is more objectionable than sewage itself. When lime is used as the precipitating agent, it destroys those organisms which are necessary for the purification of sewage, it forms a bulky sludge for which there is no commercial demand, as it is of no manurial value, and the effluent produced is likely to take on secondary decomposition when it is discharged into a large body of water. In order to get rid of the sludge, it has to be tightly compressed in sludge presses to express any moisture, and the liquid obtained during this process is likely to originate a highly offensive nuisance. The compressed sludge is then consigned to the furnaces, where an attempt is made to change its character, and foul fumes are given off.

At the North Sydney outfall, this method of treating sewage was in vogue till about six months ago. The sewage flowed from the main carrier into a channel, where it met with and became mixed with a stream of milk of lime. This mixture then passed on to the

settling tanks, where it was allowed to remain quiet for a certain time for the precipitation of the sludge. During this period of rest, the combination of the lime and the solid matter of the sewage settled at the bottom of the tank, and the supernatant watery fluid was decanted off and sent on to the sand filter beds. As soon as the liquid contents were removed, the sludge was taken from the tanks, mixed with more lime, and placed in the sludge presses, where all moisture was expressed, and the highly offensive liquid sent into the main carrier. The sludge was then thoroughly incinerated, and afterwards dug into the sand beds. It was supposed that when the sewage was sent on to the sand beds after being treated in the precipitating tanks with lime, it would undergo a process of complete purification, and that an effluent would be produced which would be innocuous, and that no harm would result if this effluent were discharged into the waters of Port Jackson. Unfortunately, the result of this method has proved very disappointing, and the effluent produced was more objectionable than the sewage from which it was obtained. The annual cost of the working of this outfall was £1,968 19s. 6d. The lime used cost £400, the coal £600, wages £868 19s. 6d., and incidentals £100. As there is not any profitable reproduction at this outfall, the cost is not in any way reduced. Notwithstanding the admitted deodorising and disinfecting powers of the soil, still it does not immediately absorb and destroy all the offensive matters of sewage. The constituent parts of sewage are chiefly of organic origin, and in the sewage an active process of decomposition takes place, which renders the organic matter in a state fit for plant food. This process in the soil is one of digestion, in which various small animal and vegetable organisms utilise their organically fixed power for their life purposes, and, as before stated, promote oxidation and the resolution of highly complex sewage matter into simpler substances. The organic matter in sewage is essentially manurial, and includes all the nitrogen eliminated from the bodies of men and animals, as well as phosphoric acid and potash. The supply of phosphoric acid and combined nitrogen, which are very essential to plant life, is not unlimited, and every grain of nitrate which can be rescued from sewage is a clear gain to the community. In sewage there exists a large number of organisms which are essential for its own destruction, and break up the material of which it is composed. Under favorable conditions, these organisms may be

so cultivated as to effect the desired purpose of sewage destruction; and when sewage is brought into contact with properly constructed artificial filters, it is immediately attacked by living organisms, such as are universally present in the upper strata of the soil. In such filters these organisms exert an influence through which the harmful portions of the sewage are disintegrated, and the elaborate processes of the laboratory of nature are so closely imitated that an innocuous effluent of high manurial value is produced.

There is, therefore, no weight in the objections of those who base their argument on an abstract or nebulous idea, without knowing the circumstances of environment, and oppose their vapid ideas to the truth of known facts. The resolution of the highly complex matters found in sewage is called hydrolysis, and is performed by the natural enzymes, which are the product of animal and vegetable life and render large quantities of solid matter quickly soluble.

The satisfactory type, therefore, of sewage treatment involves this process of hydrolysis, which is the disintegration and liquefaction of solid matter. It has been very clearly proved that the whole work involved in transforming sewage can be very capably performed by bacteria, without the aid of any precipitating agent. The lime process has very little to recommend it, as it is difficult to accurately adjust the lime in proper quantity to the sewage, and it produces a poor effluent. The complete destruction of organic matter involves the presence of free oxygen to aid those processes, which are initiated and carried out by bacteria. The rapidity with which the various bacteria liquefy the solid organic matter varies considerably, and it is claimed by Mr. Cameron that those bacteria which live in the absence of air are the most active liquefying organisms. The septic tank, originally covered, but now left uncovered, is really a cess-pool or receptacle, which favours the multiplication of certain organisms and brings the whole of the sewage matter under their influence. In the septic tank it is intended to promote the growth of the liquefying organisms present in the sewage, and the chief intent of this method of sewage purification is the disintegration and liquefaction of the solid matters of sewage, so that it may be prepared for the action of the biological filters in the second part of the process. The inlet and outlet are submerged, so as to minimise the disturbance of the contents of the tank by the incoming and outgoing streams, and, in the

case of the covered tank, to prevent the admission of air and the exit of gases. This system of sewage disposal is installed at the outfall works, draining the district of Chatswood and North Willoughby. At this outfall the sewage passes into open septic tanks, and from them is discharged into the coke filters, the effluent from which passes into an adjacent creek.

The cost of maintaining this system amounts to £180 per annum. When sewage fills the septic tank, a scum three or four inches thick forms on the surface, and flakes of organic matter fall to the bottom of the tank. At the bottom of the tank decomposition takes place, and bubbles of gas are carried from this fermenting mass out at the top of the tank, and in this way millions of bacteria are continually falling with the organic matter from the scum to the bottom of the tank. The whole mass in the tank is thus constantly interchanging, and the liquefying bacteria are thus brought into contact with the whole of the organic matter in suspension. The solid or organic matter in suspension has been rendered soluble, and the total organic matter is actually reduced by the process, the lost organic matter being given off in the form of various gases.

Messrs. Dibden and Thudichum made a series of experiments which prove that the septic tank is not actually a necessity for complete purification. They show that as "the whole of the purifying action is due to the encouragement given to the genesis and living of the micro-organisms," better results are obtained by allowing the sewage to flow directly on to a bacterial tank composed of stone ballast or burnt clay, where it becomes disintegrated and liquefied by the same class of organisms as are found in the septic tank.

As far back as the year 1892, Scott-Moncrieff proposed the utilisation of bacteria in the treatment of sewage. He constructs a bacterial tank of graded ballast in the same manner as Dibden, but in order to get rid of the sludge he arranges the tank so that filtration takes place in an upward direction. The treatment of sewage in the septic tank of Cameron, the bacterial bed of Dibden, and the cultivation tank of Scott-Moncrieff, aims in each case at disintegration and liquefaction of sewage matter through bacterial action; but, in order that the sewage shall become properly purified, another stage of purification is necessary. In this second stage the process is accomplished by the action of those micro-organisms which will not live except in the presence of oxygen. To supply a sufficiency of

oxygen, aeration is necessary. No system of cascades, as formerly was supposed, is sufficient to adequately oxidise an effluent through aeration, and the purifying action of aerobic bacteria, as we have already seen, best takes place during the passage of thin films of fluid over surfaces exposed to the presence of air. The secondary filters in which this process is carried out are composed of coke, breeze, burnt clay, granite, coal, etc. They are arranged in a series, so that, when one is filling, the others are resting or emptying. There is, therefore, a period of filling, a period of resting, so as to allow the sewage matter to be thoroughly acted upon by the aerobic organisms, and a period of emptying, during which the air is drawn in by following the sinking fluid or by filling the vacuum caused by the sinking fluid. This period of emptying is most important, as the fresh amount of air taken in during this period assists the organisms in perfecting their attack on a fresh supply of sewage. Deficient aeration causes a filter to act badly, but, if the aeration is efficient, organisms which are exclusively anaerobic will disappear, and, according to Houston, "99 per cent. of the pathogenic bacilli can be removed by the action of a septic tank followed by treatment in a well-aerated filter." There is no advantage to be derived from an excess of oxidation, for, as aerobic organisms are non-putrefactive, their capacity for work depends upon the power of the water containing them to absorb oxygen. The action, therefore, which takes place in these filters is a vital one, and requires that the material used as a filtering medium should afford good interstitial space to allow of the free introduction of air when the bed is emptied, so that the bacteria may be enabled to increase their activity. If the action of these filter beds was merely one of straining, they would soon clog and become useless. Gas coke is usually considered to be the best material for filling these beds, as it permits of a greater volume of sewage being present through allowing of a greater interstitial space than any of the other proposed media.

Garfield, of Wolverhampton, however, maintains that "coal has a special power of removing putrescent organic matter from sewage, that it has at once a chemical action, and that its purifying power is marked from the first day it is used." Whatever material may be used for filling these beds, it is very important to remember that the action at first is not perfect, and that the capacity for purification improves and increases with time. It ill becomes anyone at this time to dogmatise, but

it appears as if we have at last regained the track to follow the true teachings of nature as regards sewage purification. "The biological treatment of sewage is conducted under control, and all pathogenic bacteria disappear when passing through the filters by being crowded out in the struggle for existence, in a nutritive medium containing a mixed bacterial flora, by the numerous harmless varieties of enzymes of the saprophytic species, which thrive at ordinary temperatures."

The difficulty which has always presented itself in all methods of sewage purification is the formation of a refuse product known as "the sludge." This separates, for the most part, as a scum or deposit in the septic tank, and is left as a black mass on the bacterial bed. Drs. Kenwood and Butler have made numerous experiments with regard to the getting rid of this evil. They are of opinion that it may be got rid of most effectually by first passing the sewage through a Scott-Moncrieff cultivation tank, in which filtration takes place in an upward direction, and then continuing the process in the coke beds, where the filtration is in a downward direction. They believe that while "upward filtration offers a better prospect of effecting the separation and solution of the suspended matters in sewage, it at the same time reduces the pollution of the effluent better than any system which aims at their removal by digestion in a hollow chamber, such as the septic tank." The sludge disappears in the substance of the Scott-Moncrieff cultivation chamber.

At the Rockdale end of the Botany Sewage Farm a small series of experimental tanks has been installed to deal with the waste products of 160 persons. The installation consists of a Scott-Moncrieff cultivation tank and four biological filter beds, two being filled with coke and two with coal. The Scott-Moncrieff cultivation chamber works well, gives off no smell, and as yet shows no sign of being in any way clogged. After the sewage has undergone a process of disintegration and liquefaction in the Scott-Moncrieff tank, it is discharged automatically over each of the biological beds as they may be ready to receive it. These beds are in turn rested, emptied and filled by another automatic arrangement, so that each bed has its period of filling, resting full, discharging and resting empty. The cost of maintaining this installation is about £10. per annum, and it would cost little, if any more, to maintain an installation of the same character, even if it were five times the size.

Mr. J. M. Smail, Engineer-in-Chief to the

Metropolitan Board of Water Supply and Sewerage, states:—"The experience gained at Botany is that it requires twenty-five acres of land to be prepared to deal with 1,000,000 gallons of sewage per day. To prepare one acre of the existing surface for receiving sewage would cost £483, the subsoil drainage £100, and the distributing drains £20, making a sum total of £603. The preparation of twenty-five acres, therefore, would cost more than £12,000, while 1,000,000 gallons of sewage could be dealt with by an installation of bacterial tanks at a cost of £10,200, which would mean a saving of at least £1,800 per 1,000,000 gallons of sewage treated. To provide for the necessary future treatment of sewage on the farm would cost £36,000 for land filtration as against £30,200 necessary for installing the bacterial system, showing a saving of £5,800 by using the latter treatment. The adoption of the bacterial system at the Botany Sewage Farm would bring about an annual saving of £3,363, or sufficient to pay the interest on £110,513."

In order to test the value of the effluent from the before-mentioned installation, at the Rockdale end of the Farm, it is turned on to a small plantation, which at the present time yields fine crops of vegetables. At North Sydney outfall, as before stated, an attempt has been made to purify the sewage by means of lime precipitation. Several difficulties have presented themselves to this form of treatment. First: The effluent produced showed little or no purification. Second: The effluent readily decomposed, and was, in fact, at times, worse than the original sewage itself. Third: The bulky sludge produced was of no manurial value, and was difficult to get rid of. Fourth: The liquid expressed, through compressing the sludge, was highly offensive, and likely to cause a nuisance.

The Outfall Works at North Sydney consist, in addition to all the machinery, of six large brick and cement settling tanks, and a series of sand filter beds. Two of the settling tanks are kept empty, three have been changed to open septic tanks, and the sixth has been divided into three parts. The first of these divisions is filled with graded ballast, and is used as an upward filtration tank; the other two divisions are filled with graded ballast, and are used as downward filters. From the analyses which I have made from time to time, I find that the effluent produced by this sixth tank shows about 35 per cent. of purification, and that the effluent which is obtained from the filter beds where they discharge into the

waters of Port Jackson, is purified to the extent of 58 per cent.

It will be seen from the contents of this short paper that in the metropolis of Sydney we have had a very varied experience in the matter of sewage purification and sewage disposal. At the Northern Outfall we have the sewage disposed of by the action of the sea. At the Southern Outfall we have the sewage treated by land filtration. At the Western Outfall we have the installation of the Scott-Moncrieff cultivation tank, and the coal and coke filter beds. At the North Sydney Outfall we had the precipitation treatment by means of lime, and now have the system already described. At Willoughby Outfall we have the septic tank system.

The moot point for consideration in comparing these various systems is, which system, up to the present, has proved itself the best? In debating such a point two things naturally come into the foreground of our logic, viz., economy and effect. Economy as to the amount necessary for maintenance and expenditure has already met with some consideration, and we have seen that the biological method of treating sewage needs a less costly expenditure than other methods, and that a very considerable saving is effected in the cost of maintenance. The substitution of the present mode of treating sewage at the North Sydney Outfall for the old system of precipitation by means of lime, has brought about a saving in the cost of maintenance of £800 per annum, or capitalized at $3\frac{1}{2}$ per cent., of £22,857. The biological method of sewage treatment makes it possible to provide inland towns with systems of sewerage, without incurring the expense necessary to provide costly sewage farms, with costly sewerage systems.

Whether it will be advisable to substitute this form of treatment for the disposal of sewage by the sea, as yet remains to be proved, but in my mind there is no doubt that such will be found to be the only true solution of the difficulty of sewage disposal, not only on account of the economy of maintenance and expenditure, but also on account of that economy which concerns the maintenance of plant life. It has already been mentioned that plant life needs nitrate for the completion of its life cycle, and its sphere of usefulness, and we know full well that this useful substance is daily lost in immeasurable quantities, by discharging sewage into the sea, or into other such places, whence there is no opportunity of recovering it. If then, through scientific research, any method of sewage disposal has

been placed within the reach of man, by means of which this valuable adjunct and necessity of the economy of plant life can be recovered, it is our duty to carefully consider such a method, and to endeavour to perfect it.

In discussing the question of sewage disposal one must very carefully study the nature of the sewage to be disposed of, and the locality whence the sewage is discharged, as each locality needs special plans and special treatment. During the great Victorian era through the great improvement in Arts and Applied Sciences, many methods of sewage treatment have eventuated. The chemical treatment has had its advocates, but the experiments of Dibdin and Dupre have thoroughly proved "that the antiseptic treatment of sewage by lime and other precipitating agents is a mistake." Our own experience with this method at the North Sydney Outfall has led us to conclude that the use of lime as a precipitating agent is not only a fatal mistake as regards purification of sewage, but also because it produces an effluent which is of a worse nature than the raw sewage itself. The experience gained at the Botany Sewage Farm is not such as to lead us to believe that the best form of sewage disposal is by treating through land, although this system has been so much lauded by Colonel Jones and others. At Botany we find that when the beds are worked with a small quantity of sewage, they produce a fairly good effluent, but that when they are taxed to their full capacity, the effluent produced shows only signs of mechanical separation, without any evidence of purification.

This, then, clearly shows that for efficient sewage purification a large acreage of ground is necessary, and that where such an area cannot be appropriated the land treatment of sewage will prove a failure, and that we must look for some more constant and readier method of sewage purification which can be installed and carried on in a smaller area. From the analyses made by Mr. W. Doherty, Assistant Government Analyst, and myself, the installation of the Scott-Moncrieff tank and the biological tanks at Rockdale gives an effluent showing 70 per cent. of purification, and I have found as much as 80 per cent. of purification.

The septic tanks at Chatswood show 65 per cent. and occasionally 70 per cent. of purification. The present system at the North Sydney outfall works yields an effluent showing 55 per cent., and occasionally 60 per cent. of purification.

I have avoided leading you into abstruse

calculations, and have endeavoured to put before you the advantages and disadvantages of the various systems of sewage treatment. When you weigh carefully all the facts of the case, you will see that we are at last upon the right track, and that the most rational and best system of sewage purification is that recommended by Drs. Kenwood and Butler, viz, a Scott-Moncrieff upward filtration tank supplemented by a series of biological filters filled either with coal or coke. It matters little what material is used for filling the filters, as long as it is hard enough to withstand weathering action and the particles are so large that capillary attraction does not prevent the free passage of the air into the interstices of the filter. Probably the best and simplest form of the system recommended is that suggested by Dr. Sydney Barwise. He sends the sewage with a velocity of forty feet per minute into a detritus tank, where by a swirling movement of the sewage the detritus is deposited on the sloping side of the tank; thence the sewage passes through iron screens, the bars of which are half an inch apart, and then under a scum board. After being screened in this manner, the sewage falls into a septic tank constructed on the Dortmund principle, and thence it is sent laterally into a Scott-Moncrieff cultivation tank, through which it passes by upward filtration to be distributed over a percolating filter composed of coke or coal. The distribution is so arranged that a definite quantity of sewage is applied to every square yard of the filter in an intermittent manner, and the filter itself is composed of coke properly stacked without any retaining wall.

In closing this paper, let me pay one word of tribute to those who have through all ages endeavoured to work out the social problem of sewage purification. Some are known, but others, who have done yeoman service, are unknown, for the man of sense is the most self-conscious of craftsmen; he is unselfish in his outlook upon posterity, and only sometimes even tradition preserves in an imperishable sketch the memory of his triumph.

DISCUSSION.

Dr. HUDSON (New Zealand) would like to know had the Scott-Moncrieff system been in use in any locality for a lengthened period without being offensive?

Dr. JAMES MASON (New Zealand) testified to the satisfactory use of the septic tank system in small communities, as they might be drained at little expense. The septic tank, however, was found of no use in abattoirs without precipitation treatment as well. As to these tanks in hospitals, care must be taken to keep the washings from the operating theatre out. These tanks did not eliminate all pathogenic germs.

Dr. STONEY showed how the septic tank system was a failure at a hotel at Nowra, through the lack of care and attention.

Dr. HAM, Commissioner of Public Health, Queensland, asked how the sludge was dealt with at Chatswood. He congratulated Dr. Kendall on his excellent paper, and wished to endorse his remarks.

A hearty vote of thanks was passed to Dr. Kendall, who, replying to speakers, said they had had the Scott-Moncrieff tank working in Sydney for two years, and no one had ever complained of a smell arising from it. The cost for installation was £15. It was found inadvisable for refuse from a hospital to go through these tanks.

The PRESIDENT of the Section mentioned how the sewage of Chicago, with 1,000,000, was discharged into the waters of one of the tributaries of the Mississippi.

A METHOD OF OBTAINING THE URINE SEPARATELY FROM EACH KIDNEY, AND ITS VALUE IN THE DIAGNOSIS OF SOME DISEASES OF THE URINARY TRACT.

By H. L. Maitland, M.B., Ch.M., Assistant Hon. Surgeon, Sydney Hospital.

THE paper which I have the privilege of reading to you this evening is on a method of obtaining the urine separately from each kidney, and its value in the diagnosis of some diseases of the urinary tract. It has for many years been recognised that for the accurate diagnosis of some renal affections it is necessary to obtain the separated urines. A rational method of treatment can only follow a correct diagnosis, and in no branch of surgery is this axiom truer than in renal surgery. If the urine from each kidney can be examined separately it very materially aids the surgeon in making a correct diagnosis, adopting rational treatment, and in giving a prognosis, based on sound premises. If the separated urine cannot be obtained how can we, in some instances, for example, early renal tuberculosis, diagnose which kidney is involved. The cystoscope may lend valuable aid in cases of renal hemorrhage, but it does not give the same amount of assistance in pyuria, nor can we get by it any idea of the functional capacity of each kidney. This can only be done by testing the urine separately collected. The instrument that I will describe to you to-night is not intended to supplant that most valuable instrument, the cystoscope. Each has its own proper field of operation. The cystoscope reveals an abnormal condition of the opening of the ureters, and if one orifice is abnormal it is an aid to us in diagnosing renal affections. It may show the escape of blood or pus from the ureters, but my experience has shewn that when either is present in the bladder

it sometimes is, even after the most thorough irrigation, difficult to find the orifice of the ureters. There are few surgeons, I think, who will deny the value of obtaining the separated urines in cases where either the operation of nephrectomy or nephrolithotomy is contemplated. How, otherwise, can a prognosis be given? What is the state of the other kidney? Are both kidneys secreting urine, or only one? Are both kidneys involved, or only one? These are the questions that we ask ourselves, and they cannot be answered unless the urine be obtained separately from each kidney, and an estimate made of its working capacity. Nephrectomy and nephrolithotomy have many times been done, and been followed by fatal results. If it had been possible to obtain the urine separately, I am sure that some of the operations would not have been carried out. This fact was well borne home to me in my first case of nephrolithotomy before it was possible to ascertain the presence of calculi by means of Röntgen rays. The patient had well-marked symptoms of renal lithiasis on the right side. The symptoms had extended over a period of seven years. There had been also symptoms on the left side, but they were not marked. I did a nephrolithotomy on the right side, and removed three calculi about the size of large marbles from the pelvis of the kidney. There was considerable destruction of the kidney, the upper two-thirds being replaced by a hydronephrotic sac. The patient died two days after, with complete suppression. Permission was given to examine the other kidney, and it was found to be simply a pus sac containing several calculi with practically no kidney substance, and probably no secretion was going on on that side. If I had been aware of this before the operation I would have given a more guarded prognosis and probably would not have done the operation. The very great importance of being able to examine the separated urines has been recognised ever since the advent of renal surgery, and ingenuity and skill were early directed towards attaining this object. It is not necessary, in a paper of this kind, to describe in detail the various devices that have been adopted to accomplish this object. Simon, the first surgeon to deliberately do the operation of nephrectomy, saw the importance of obtaining the separated urines, and he suggested that the ureter should be compressed at the pelvic brim by the hand introduced up the rectum. Davy's lever was then used instead of the surgeon's hand. Then followed Ebermann's forceps, the ureter being compressed between one blade in the bladder, and the other

blade up the rectum; Tuckman's forceps, which were introduced into the bladder, the vesical end of the ureter seized and temporarily occluded; Polk's S-shaped catheter, one ureter being compressed between it and a finger introduced up the rectum; Silbermann's vesical rubber bag, which was introduced into the female bladder on the one side and filled with mercury, the idea being to compress the ureteral orifice on that side; Fenwick's curved catheter with a lateral opening, which caught the urine as it escaped from the ureter. Dr. Neumann invented a double catheter similar to the segregator, the pockets on either side of the bladder being formed by a finger in the rectum. Hegar suggested that each ureter be cut down upon in the anterior vaginal fornix and compressed. Many other surgeons have advocated ventral coeliotomy. Edebohes, as late as 1898, advocated exploring each kidney through the loin, and Henry Morris, in his book published last year, says that it is wiser to explore each kidney through the loin than to expose the ureter to infection by ureteral catheterization. Simon invented a speculum which was introduced into the bladder; light was reflected and the ureters catheterized, and what to-day is called Howard Kelly's method is an improvement on Simon's idea. All these methods, with the exception of Howard Kelly's, have been abandoned. To-day there are two methods of obtaining the separated urine, both ingenious, but entirely different. One is by means of the ureteral catheter, and the other is by means of the segregator, invented by Professor Malcolm Harris, of Chicago. The ureteral catheter, as used in the male, is the offspring of the cystoscope, and I shew you one invented by Albarran, and it only requires a cursory examination and a slight knowledge of cystoscopic work to see that it is a difficult instrument to use. The latest invention for obtaining the separated urine is the segregator. The construction of the instrument is simple, and it is easily worked. It consists of two metal catheters enclosed in a sheath. The two catheters are introduced into the bladder as one instrument, and are then rotated until the ends dip into a pouch which is formed on either side of a longitudinal fold by a septum which passes up the vagina in the female, and the rectum in the male. A bulb aspirates the air from the two small bottles attached by tubing to the distal ends of the two catheters. I will for a few minutes speak of these two methods of obtaining the separated urine. I think I am correct in saying that all writers admit the very great

difficulty of catheterizing the ureters, except Albarran; but even he states that in some cases, even when the vesical medium is clear, the ureteral orifice is only discoverable after prolonged search, and in some patients no amount of ingenuity and skill succeeds in passing the catheter more than three or four c.m. along the ureter. I believe that the ureters should only be catheterized when every other means of examination has failed. It is an operation that is not free from risk; there is always some traumatism of the ureter and ureteral orifice, as is evinced by the ecchymosis around the orifice and the bleeding from the ureter. This injury of the highway to the kidney provides a suitable soil for infection, the seeds of which are already sown, either in the bladder or kidney. Again, there is the ever present danger that the small catheters are not sterile; boiling destroys them. Howard Kelly now uses catheters that can be boiled. The danger of infection is, to my mind, the chief disadvantage of ureteral catheterization. It is not within the scope of this paper to consider other objections to it, such as blockage of the catheter by blood or pus, the contamination of the urine by blood due to injury to the mucus membrane, the reflex effect on the kidneys, causing temporary suppression, the alterations that take place in the size of the ureters in renal diseases, the necessity of having a transparent medium in the bladder in the male, the fever which sometimes follows, resembling urethral fever, and stricture of the ureter following injury by the catheter. The segregator is free from all these disadvantages. Before leaving the subject of ureteral catheterization, I would like to raise my humble protest against it as a method of treatment for stricture of the ureter; the bougies used are, as Henry Morris says, too small, and, if larger ones are used, the ureteral orifice becomes over-stretched and loses its valve-like function, and the kidney is exposed to the danger of ascending infection. This is advocated by Howard Kelly, but Kelly goes further and recommends catheterization and irrigation as a method of treatment for hydro- and pyo-nephrosis, and, as a preliminary to nephro-lithotomy, it is useless for these conditions; it is worse, it is dangerous and unsurgical, and, while one may admire the enthusiasm that prompts a man to catheterize a ureter 120 times in three months till he has to desist on account of constitutional symptoms, and then without relief to the patient, one may question his judgment and, at the same time, regret that he migrated from the realms of gynecology. There are two

objections which may be advanced against the segregator, and they are these:—First, that the water-shed formed by the lever is not effective, so that urine from both kidneys is found in each little pocket; and, secondly, that each pocket drains its corresponding half of the bladder in addition to the ureter. That this is an objection I admit. That the water shed is effective I feel assured, and there are two ways of demonstrating it. First, by examination of a patient with one kidney, the other having been removed; secondly, the results of examination by the segregator proved to be true by subsequent operation with relief of symptoms. The segregator will aid in making a diagnosis in some of the following conditions:—First, in pyuria it will establish the source of pus. Secondly, if the pus be renal in origin, it will show us from which side it comes. Thirdly, in hæmaturia, if it be renal in origin, it will also determine from which side it comes. Fourthly, it will aid in localising obstructions to the ureter, and determining whether such obstruction be permanent or intermittent. Fifthly, it also establishes the presence of both kidneys. Sixthly, it will aid us in a differential diagnosis of some abdominal tumours. Seventhly, it also enables us to find out the capacity for secreting of each kidney. In pyuria, one can tell in some cases whether the pus is renal or vesical in origin in the following way—by comparing the urine as it is drawn off from the bladder with the urine as collected by the segregator after the bladder is thoroughly irrigated. It is evident that if the urine as drawn off from the bladder contains a quantity of pus, and that collected by the segregator is clear, that the pus is vesical in origin. I am aware that there is a source of error from the fact that each pocket formed by the lever drains the corresponding half of the bladder, but the amount of pus that forms in the bladder in thirty minutes—which is long enough to collect the separated urines—is small, and can be disregarded. It is as well to irrigate each pocket through the segregator thoroughly, as it is difficult to remove all the pus. I have frequently noticed with the cystoscope that, even after irrigation and the return fluid is clear, that a quantity of pus still adheres to the trigone. Certain directions have to be followed to make the instrument effective and prevent the urines from mixing. First the patient should lie flat, with the pelvis slightly raised, so that there is a slight slope of the bladder towards the fundus. Secondly, the instrument should not be pushed

in too far, but just so that the curve of the catheters lie against the opening of the urethra. Thirdly, the instrument should be kept in the middle line. Fourthly, the bladder should be irrigated previous to, and after the introduction of the instrument. Fifthly, four or five ounces of fluid may be left in the bladder to facilitate turning the instrument; there is less likelihood of any bleeding from the bladder wall. This precaution is not absolutely necessary, because if gentleness is used there is not likely to be any bleeding. After irrigation the first fluid is of course discarded. The instrument fails in certain conditions. Firstly, where the prostate is very much enlarged. Secondly, in vesical tumours. Thirdly, in vesical calculi. Fourthly, in cases of a vesical ulceration. Fifthly, in markedly contracted bladders. I am unable, from experience, to give the lowest bladder capacity that allows the use of the instrument, but I have failed to use it in the following case:—The case was a male on whom I have done an internal urethrotomy for penile stricture, which he had had for 15 years. I also had removed suprapubically a small stone which was partially blocking the orifice of his left ureter. This patient had marked hypertrophy of the bladder wall, with a vesical capacity of only two ounces. I have examined forty-seven cases with the segregator up to the end of last month, and I propose to give you a few of the cases which will illustrate its reliability and its use.

CASE I.—A young married woman came under me in Sydney Hospital. She had a urine-discharging sinus in the left loin which had been present nine months, ever since an operation on the kidney she had undergone in the country. She gave a typical history of left renal colic, the first attack dating back nine years. I did nephrectomy, as the kidney, what remained of it, was embedded in a firm mass of connective and adipose tissue. Lying in a pus sac was a fairly large oxalic calculus. Eight weeks after the operation the patient was perfectly well with the exception that the urine contained a slight quantity of pus. The bladder was irrigated and the segregator introduced. Both pouches were emptied of the sterile fluid which had been thrown into the bladder, and then during an examination extending over three-quarters of an hour, the right vial at first slowly and then rapidly filled. The left vial collected at first a few drops, not more than a dozen, which I put down to the fluid which had gravitated from the left lateral wall of the bladder into the pouch. During the last half-hour of the ex-

amination no fluid entered the left vial, but the right vial filled with normal urine. A week later another examination was made, with the same result. Three hours after this examination the cystoscope was introduced with the object of ascertaining if there was any bruising or ecchymosis of the trigone by the lever. There was none. There was increased vascularity and blurring around the opening of the left ureter, which remained widely open and gaping, and I feel sure that the small quantity of pus came from this ureter, which I have no doubt had been involved in the inflammatory process extending from the kidney on that side. I had no opportunity of using the instrument on this case before the nephrectomy.

CASE II.—A young married woman consulted me. She complained of pain in the right loin and of passing blood in the urine. She had had two attacks of renal colic, accompanied by hæmaturia during the past twelve months, the last attack having occurred the previous day. At the time of examination the right kidney was felt freely moveable and tender, the urine slightly smoky, due to the presence of blood. The cystoscope was introduced, but the medium was not sufficiently clear for a satisfactory examination. The following day the segregator was used, the bladder thoroughly irrigated, and the separated urines obtained

The amount collected in 30 minutes.	Right side, 2 drachms.	Left side, 3 drachms.
Color ...	Dark Brown	Light Brown
Blood ...	Present	Absent
Albumen ..	Large Quantity	Slight Quantity

I admitted the case into Windermere Private Hospital and did a nephropexy. The kidney was found engorged and freely movable. There has been no recurrence of the symptoms since the operation. There was sufficient evidence on the physical signs in this case to make a diagnosis of movable kidney with a twisted pedicle, but the instrument was used to test the reliability of the septum.

CASE III.—A young male adult, aged 23, consulted me. He complained of some pain above the pubes, somewhat to the right side of the middle line, and a frequency of micturition. There was no history of renal colic or of hæmaturia. The father had died of phthisis; the urine contained a quantity of pus. Cystoscopic examination revealed nothing abnormal in the bladder except that there was some undue patency of the orifice of the right ureter with some surrounding hyperemia. The segregator was introduced, and the bladder freely irrigated. The urine from the left

kidney was quite normal, but that from the right contained pus. I thought the case was probably one of commencing renal tuberculosis, and kept the urine for a bacteriological examination, and advised radiography. The following morning the patient presented himself with a small oxalic stone jammed in the urethra at the meatus, which I removed. After carefully irrigating the urethra and bladder, I introduced the cystoscope and found the orifice of the right ureter patent and the edges lacerated—sufficient evidence of the passage of the calculus. The orifice of the left ureter seemed to be in a state of increased activity; the lips pouted and gaped and closed incessantly, and the impression I received was that there was a temporary decrease in the secretion on the right side with a compensatory increase on the left. The use of the segregator in this case proved two things: First, that the pus was renal or ureteral in origin, not vesical; and secondly, that it was localised to the right side, and this state of affairs was verified by the second cystoscopic examination.

CASE IV.—A male adult of 30 was admitted under me in the Sydney Hospital. He gave a seven years' history of left renal stone, pain, hæmaturia and purulent urine. A radiograph revealed three right renal calculi. The separated urines were collected by the segregator; the right kidney secreted during the thirty minutes that the urine was being collected five times the quantity that the left side secreted. The urine from the right side was perfectly normal, that from the left contained a small quantity of pus. I did a nephro-lithotomy, and removed three oxalic calculi from the left renal pelvis. The upper half of the kidney was a hydronephrotic sac. Patient was discharged cured in five weeks from date of operation.

These cases are a few of the many in which I have collected the separated urines, and they have been chosen because they demonstrate the reliability of the septum formed in the bladder, as proved in one instance by the cystoscope and in the others by subsequent operations.

In conclusion, I wish it to be distinctly understood that I do not think it is necessary to obtain the separated urines in all renal affections. The history and clinical signs will in most cases be sufficient to guide us to a correct diagnosis, but when it is necessary to do so I think the segregator is preferable to the ureteral catheter, and I repeat a statement which I made earlier, that I do not think the instrument does in any way supplant the cystoscope. If I have succeeded in making

those present this evening regard the segregator as a useful adjunct to the cystoscope in the diagnosis of some renal and bladder affections; then I feel that this paper has fulfilled the purpose for which it was written.

SOME POINTS IN NEPHRECTOMY.*

By J. B. Nash, M.D., M.R.C.S., Sydney.

Is there anything more marked in the surgeon's work of the last twenty years, than the fact, that he who would command success, must be as much a man of science, as one possessing manipulative dexterity? In no branch of surgery is this more manifest, than in that dealing with the urinary apparatus. With how much of trepidation for the welfare of the patient was the operation of nephrectomy undertaken in only recent years? The experiments of Prof. Rose Bradford made our minds at ease, by furnishing us with the proof, that one-third of the kidney weight was in itself sufficient for the excretion of urinary solids and fluids from the body, the while being consistent, in other directions, with the maintenance of perfect health of mind and body. His experiments were made on dogs, but the daily-accumulating evidence makes it more plain, that the conclusions he arrived at are applicable to the human individual.

When one looks at his bookcase, and sees before him the last edition of Mr. Henry Morris' work on "Surgical Diseases of the Kidney and Ureter," it makes him dubious about writing anything upon the subject. The information accumulated within those covers is so great, that it leaves almost nothing to be desired. Yet, in our congresses, the personal view of even the humblest may be of service in opening a discussion, from which may be derived information that may be of use at a critical moment.

To reach the kidney by an incision, the lumbar route was until recent years almost exclusively used; now one only thinks of the oblique lumbo-inguinal, or the transperitoneal from the anterior abdominal wall. The former is the one of election, and it is that with which these observations deal. The avoidance of injury to the twelfth dorsal nerve, and the finding of the lumbar fascia, where the knife can be passed through in almost absolute safety, constitute the only points of importance in the incision proper. In regard to this, the striking feature in the appearance of the healed incision of the present day, is the relation it bears to

the iliac crest and Poupart's ligament. Until lately it did not approach the latter, and it was at right angles to the former. Every practical surgeon knows, how much greater is the facility he has in dealing with the kidney and adjacent areas, by the simple alteration in the direction along which he first applies his knife. The enlarging of the deepest part of the incision, with the pushing aside of the adjacent peritoneal reflection, are matters of but a few moments. At this stage an important consideration always presents itself to me: What is the level of the kidney in regard to the other structures? It would appear that in different individuals the variation is somewhat considerable. Whether it lies nestled high up under the liver or the diaphragm? Whether it approaches nearer to the spinal column than the anatomical description suggests? Or, whether it lies immediately beneath one's incision and is ready to hand? The beginner in renal surgery will here find the seat of his greatest difficulty. When it has been decided where the kidney is situated, the snipping of the posterior layer of the transversalis fibrous tissue and the opening of the delicate primrose (Mr. Henry Morris) coloured fatty capsule will expose the surface of the organ. This fat is an anatomical characteristic that does not exist in gross pathological lesions, but it is a well recognised entity in cases of small calculi, diseases of the papillæ, and increased vascular engorgement or tension. Mr. Hurry Fenwick has done some excellent work on the second, and Mr. Reginald Harrison equally deserving work on the third of these affections.

The question of the correctness of diagnosis, and of the justification for operation, are now in view. When this has been decided by the finding of a serious injury, a tuberculous condition, multiple abscesses or one large abscess, a tumour of the simple semi-malignant or malignant type, a large stone which has distended the main channel of the renal pelvis, and is growing out into the calices, the question arises what had best be done in the interests of the patient. Can a definite rule be laid down for our guidance? In some cases—yes. But these are the minority, they include malignancy and injuries which involve the whole of the kidney tissue. That which is likely to give most concern is the calculous condition. With small stones there is no alteration of kidney tissue, and the incision along which they are removed heals with rapidity. But with large branching calculi it is far otherwise. They have been lodged for years in the kidney pelvis; they have grown, pushing by more and more into the adjacent calices, and distending the

main sac; not alone this, but they press back the points of the papillæ, block the main tubes which open on them, and disorganise the secreting and conducting structures up to the glomeruli, and this, too, with or without an apparent enlargement of the organ, but certainly with a thickened and sodden condition of the tissue of the wall of the pelvis, which allows it to break down under pressure from the fingers, wherever there is a projecting point. All this may take place without a fluid distention of the renal pelvis, if the stone be not blocking the ureteral opening of the sac. It may also progress, and the urine remain acid, though this contain in plenty red and white blood cells, and even palpable masses of these. If one remove the stone, and leave a kidney in this condition, it is more than likely a sinus will persist, and bring discredit both on the operation and the operator. The knowledge of the state of the excretion from the other kidney becomes here of paramount importance. We are deeply indebted to Mr. Hurry Fenwick, of London, and Howard Kelly, of Baltimore, for placing us in possession of means whereby we can determine the condition of the urine flowing from the ureters into the bladder. Few objects can be more pleasing to the eye in search of an accurate diagnosis, than two jets of urine issuing from the ureteral papillæ into clear boracic solution, the one containing flakes that swirl upwards, the other nothing but the eddies of the normal fluid. Such can be viewed with the utmost precision by the cystoscope.

When we have decided that the kidney is to be removed, there will be little difficulty, if it has been possible to bring the organ outside the incision. This manœuvre depends for its performance, upon the length of the tissues which are attached to the hilum of the kidney. In healthy anatomical states these appear to vary greatly, and, in diseased conditions it is probable, that the number of kidneys which can be brought on to the abdominal wall is diminished. The large pressure forceps which are now available, enable us to effectually control hæmorrhage while we remove the diseased organ, and the needles for passing silk afford us the utmost facility for the introduction of ligatures beyond the seat of the pressure forceps.

There have been few moments in practice, when the wish for more precise knowledge has been uppermost, than when, standing over an exposed kidney from which a large branching calculus has been removed, the consideration arises, should this organ be returned and drained or removed. Whether the incision has been made by design and along the convex border of

the kidney, or by necessity through the posterior wall of the pelvis, the result is nearly the same, a large and gaping wound through the thickened and altered tissues, exposing not only the main space of the sac, but also perforce, to detach the branches, as many of the calices as have been encroached upon. Were one in the position of having a skilled pathologist at his elbow to whom he could hand a small piece for immediate microscopic examination, he might wait for a few minutes to learn if the tubular structure has been so altered, and the glomeruli to such an extent put out of action, as to render the kidney of little use for its excreting purposes. With our limited population and consequently hampered means, it is not probable that we shall be, even in our best equipped hospitals, at such a stage of perfection for some time to come. A thorough knowledge of the macroscopic, (and in this I include, viewing the urine with a cystoscope as it issues from the ureters into the bladder), the chemical, and the macroscopic characters of the urine excreted by the patient anterior to the operation, will aid us much, at the time when the best action to be taken in the interest of the patient has to be decided without delay. The means at our command are sufficient to enable us, with a little care, to arrive at a fairly accurate estimate of the condition of the fluid as it leaves the kidney both in male and female cases. A dominant note, even in Morris' book, when this subject is being dealt with is, the kidney should not be removed if there be even a remote chance of its subserving a useful function in the future. My mind holds a doubt, whether a wounded kidney exercises an effect which is not good upon the opposite kidney in the body, and it has been much exercised in this direction by a case with which latterly I had to deal. A large stone was removed, progress was not good; the wound in the kidney did not progress satisfactorily, a sinus was the result. The amount of urine passed, including that lost along the sinus, was not up to the ordinary standard, for the first forty-eight hours after the operation, only eight ounces passed through the bladder. After a time a second operation was performed, and the kidney tissue was entirely removed. Within forty-eight hours, the patient began to improve visibly, the amount of urine passed by the bladder at once ran up to forty ounces. He began to put on flesh, and in the course of two weeks he was a new man. That one healthy kidney is quite capable of performing all the work of the body, is evident from the knowledge now to our hand. That it

does it better in the absence of a diseased fellow this case suggests. A microscopic examination of the kidney removed, exhibited a condition of the tubules and of the glomeruli, which pointed to its being not of much use as an excreting organ.

*[Read before the Section of Surgery at the Intercolonial Medical Congress at Hobart.]

THE RÖNTGEN RAYS, WITH SPECIAL REFERENCE TO RENAL RADIOGRAPHY.

(Portion of paper read before the Intercolonial Medical Congress, Hobart, 1902.)

By L. Herschel Harris, M.B., Ch.M., Member of the Röntgen Society of England, Hon. Skiagrapher, and Assistant Surgeon Sydney Hospital. Hon. Skiagrapher Children's Hospital.

DURING the past two years I have examined about one hundred cases suspected of having renal or ureteral calculi, and in only 14 have I detected such to be present, 12 of which were renal, and two ureteral.

In several of these cases the symptoms were not by any means typical.

In three cases the pains were situated on the side opposite to that on which the calculi were found; in one case a stone the size of a mandarin orange was found in a patient who only a few weeks previously had had a stone similar in size removed from the other kidney, and in two cases calculi were found in kidneys which had been previously operated on and from which calculi had been removed.

These latter cases afford a certain amount of interest, for the question arises, "Were the calculi present at the time of the original operation and overlooked, or did they form again after the kidneys had been thoroughly emptied of all the existing calculi?"

To my mind the former was the case, for in each instance the patient did not derive much benefit from the operation, and after the second operation when the calculi were removed, which were shown in the skiagrams, complete relief was afforded.

In a third case the patient presented all the symptoms of having a calculus in his kidney or high up in ureter.

He was operated upon, and the kidney and ureter exposed, with a negative result.

For a few months afterwards the patient derived some relief from the operation, but subsequently relapsed again into his former condition, and the pains he described as being intolerable.

A skiagram revealed the presence of a small calculus, and he was subjected to an operation, and the calculus removed was the size of a very small marble, very soft, and composed of phosphates.

The question in this case is, "Was the calculus overlooked at the first operation, being then very small and soft, or did it form subsequently to the operation, for the pelvis of the kidney was opened into and explored, and it is possible that the remaining cicatricial tissue might have formed a nucleus for the deposit of the phosphates?" If the latter is the case, then what was the cause of the original symptoms?

This case presented many difficulties, for when the original operation was performed many adhesions were formed around the kidney, which was very high up, and was examined *in situ*. The patient also took the anæsthetic very badly, and so, no doubt, the operation was performed as rapidly as possible, and it is just possible that a very small soft calculus could be overlooked, notwithstanding the fact that a most competent surgeon was operating.

I may mention that it is now a year since the calculus was removed, and the patient, who has been under observation ever since, is well and completely free from pain.

In one case I found calculi present in each kidney, though the patient described the pains only as existing on the one side.

In only one case so far were the calculi found to be in the kidney substance, and this case was one of those mentioned from which calculi had been previously removed.

The calculi were very small, and formed two nests in the kidney substance, one nest containing 74 very minute calculi, and the other three calculi of somewhat larger dimensions. These, I feel confident, were overlooked at the time of the original operation, and would have been missed at the second operation too, had I not insisted on their presence, and also directed where they would probably be found.

Of my 14 positive results, three were subjected to the Rays by different radiographers, with the verdict of negative result, and eventually when they found their way to the hospital I obtained a positive result in each case.

As to the urine in these positive cases, sometimes it was what one would expect in renal calculus containing crystals, albumen, pus, blood, etc., and at times it would be clear, presenting no evidence whatsoever of a calculus being present.

In the 14 positive results mentioned, 13 of

the patients have been operated upon and the calculi removed. Of the negative results three have been operated upon only and the diagnosis confirmed, whilst in many of the other cases, other causes were found to have accounted for the symptoms. So much for my successes.

Now as to my failures—

In one case which I interpreted as a positive result, no calculus was found.

This was a case of hydronephrosis in a thin and so suitable subject for the Rays.

The skiagram showed a faint shadow in the region corresponding to the pelvis of the kidney, and a second skiagram corroborated the first. Whether or no the operation was to be performed, as the patient was suffering so much pain and inconvenience from the kidney.

When cut down on and explored the hydronephrosis was found to be due to a fibrous band in the upper part of the ureter, and the pelvis of the kidney was greatly hypertrophied, and I conclude that it was the hypertrophied pelvis which cast the faint shadow on the plate.

In several of my cases, when the patients have been very stout, I have not been able to give a diagnosis of very much value, as, so far as my results at present prove, a negative diagnosis in a very stout individual is only partially to be relied upon.

In one case, that of a very stout individual I obtained a negative result, and explained that not too much reliance could be placed upon it. The patient was subsequently operated upon, and a large calculus removed.

In three cases in which I obtained negative results small calculi were passed per urethram. In each case the patient had typical renal colic, but the skiagram of course was not taken until after the pains ceased, and it must have just happened that the calculi passed into the bladder during these attacks, for after the skiagrams were taken and the negative results obtained, the patients had no further attacks of renal colic, and subsequently they returned and presented small calculi, which they had passed per urethram.

Of course it is just possible, though I do not think likely, judging by the results, that the calculi were present in the kidneys and overlooked when I radiographed the patients, being too small to detect with the X Rays.

This opens up a point, viz., "What is the smallest stone possible to be detected by the X Rays?" Lester Leonard, of Philadelphia, who appears to have done most work in this branch, says he has detected a calculus weighing a grain. So far my smallest stone detected has been the size of a small pea.

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Then, again, the question arises, "If a stone is present in the kidney, and is too small to be detected by the X Rays, should it not be left alone, as in all probability, as in the three cases I have mentioned, it will pass on into the bladder and possibly per urethram?"

The present state of my experience in renal cases leads me to come to the following conclusion, viz. :—

In a thin person a negative result can be relied upon with confidence, whereas in a very stout individual a negative result is only of the same value as a negative result would be in the case of examining for tubercle bacilli in the sputum in a case of suspected phthisis.

As to the technique in these cases :—

I can safely state that greater delicacy in manipulation and more experience is required in radiographing the kidneys and ureters than any other part of the body.

After experimenting with several kinds of tubes, all of different vacua, I found that the most reliable results were obtained by using tubes of a low vacuum, and this result I communicated to the secretary of the Röntgen Society of England, Dr. F. H. Low, and in a letter to me, dated September 1st, 1901, Dr. Low writes as follows :—"I am much interested in your success in kidney cases. I have not myself done well. I have had Dr. Lester Leonard (Philadelphia) here. He has done very fine kidney stone work, and his story is much as yours—low tubes, exposures much as yours, but no screen. Over here we have all been going for short exposures and great penetration. I think that you and Leonard show us that this must be modified. I have a case coming this week, and shall go on the soft tube line."

The value of the low vacuum was best exemplified in one case in which I took five skiagrams. The first one was taken with a tube of low vacuum, with a positive result. Three other skiagrams were taken with tubes of higher vacua with negative results, and then a fifth skiagram was taken, using the same tube as in the first case, and a positive result again obtained. The case was operated upon and the calculus removed.

In three of my cases the Rays had been used outside by different operators and negative results obtained, and I have no doubt but that the failures were due to tubes of high vacua being employed.

Now the tube which, in my opinion, is the tube *par excellence* for renal work is the "Queen Tube," or auto-regulator tube, which I obtain from Watson's, in Melbourne.

As most of you know, this tube consists of an auxiliary bulb containing caustic potash, and when the vacuum gets a little bit high in the main bulb the current passes round to the auxiliary bulb, and, heating it, causes some vapour from the potash to escape into the main tube, and so lowers the vacuum.

This happens continuously as the tube is in work.

I have many varieties of tubes in use, but none do I value so much as the Queen tubes. I have used one now for two and a half years, and it is as good as when I first used it.

In several cases I have obtained calculi with a higher vacuum tube, but I feel confident that the easily penetrable calculi, such as the uric acid variety, are very often missed by using a high vacuum.

Leonard lays down an axiom which explains and corroborates all that I have already said, viz. :—"All calculi will be detected if rays are employed that will differentiate between the shadows of tissues less dense than the least dense calculus," and upon this is based the absolute negative diagnosis and the exclusion of all calculi.

According to the axiom, one would need to obtain the shadow of the kidney in every case before being able to give a definite negative diagnosis.

Only once have I managed to obtain the shadow of the kidney, and so far as I know it was quite unintentional. This was one of my first cases, and in addition to the patient being a suitable one, the tube used must have been of just the right vacuum.

By "suitable patient" I mean a thin patient, without much muscular development, and anæmic if possible.

Unfortunately for the operator not many of the patients are like this, most of them being rather of the plethoric type.

In answer to a remark *re* stout persons and radiography, Dr. F. H. Low replies :—"Referring to your letter, we all hate the sight of the stout patient when required to do any thick part. This difficulty is generally ascribed to the diffusion of the rays in the tissues. My misfortune," he goes on to say, "has always been to have had the stoutest possible when a kidney was wanted."

So far I have not attempted to apply the screen for the detection of renal calculi, and my reasons are as follows :—

In the first place I would not use a tube of high vacuum for fear lest a calculus, if present, should be penetrated.

In the second place, by employing a tube of

low vacuum I am afraid it would be too trying to the eyes to look for any length of time to form an idea one way or the other.

There is no doubt to my mind that when the X Rays are playing on a part, absorption at first goes on. The tissues so go on absorbing the rays until they become thoroughly saturated, then penetration is effected. Of course if the vacuum be too low the tissues will not absorb sufficient of the rays to produce penetration, so that one can err on the side of employing a vacuum too low.

A stout individual might be exposed to rays from a soft tube for hours without complete penetration occurring.

The difficulty in each case is to use rays of just the right penetrating power, and, as a rule, I find the radiations from the Queen Tube sufficient for the average patient.

For stouter individuals I employ tubes of slightly higher vacua.

Now, as to the employment of the accelerating screen. Dr. Low in his letter says that Leonard employs the same methods as I do, excepting that he does not employ the screen.

Now, in every one of my cases I have used the intensifying screen, and my present intention is to continue doing so. Of course there is a slight mottling in the negative, and the definition is not so good as it would be were the screen not used, but there is no doubt that the exposure is diminished by this means, and this, of course, is a very great consideration.

Screens vary much as do tubes, but I think I am lucky in possessing a good intensifying screen, which does not show much granulation.

When taking a radiograph of a patient I always make him lie flat on the couch, legs fully extended, and with a cushion or two under the head, and in this position make the patient as comfortable as possible under the circumstances. Then I place the screen with plate enclosed beneath the patient, so that the plate, which is a 10 x 12 one, will include the last one or two dorsal vertebrae.

Very often if I suspect that a calculus may be present in the ureter I insert the plate lengthwise, so as to have another two inches of the picture.

As a rule I place the tube 15 to 18 inches above the plate, with the anode about an inch below the xiphisternum, and facing the pelvis.

I find the part just about the diaphragm, the most difficult to penetrate, and so here I concentrate my rays as much as possible.

Very often I am able to obtain the shadows of the psoas muscles, and when I manage this I usually give my decision with certainty. My

landmarks are—the vertebral column, the last one or two ribs, and the crests of the ilia. Unless these are clearly discernible I never give a definite diagnosis.

One of the most important things is to interpret the negative, and this very often causes me many restless hours.

Sometimes it is possible to detect the shadow of a calculus during the development of the plate. I make it a rule to allow white light into my dark room one minute after placing the plate into hypo solution, for the unacted upon silver makes a splendid background for detecting shadows of any sort, and very often I am able to discern more at this stage than when the negative is thoroughly fixed and dried.

After this I find that the next best time to examine the negative is when it is dry.

Then it should be taken into a suitable light and dodged about till every particle of the negative is thoroughly mastered and interpreted.

A light greenish wall in my back yard forms an excellent background for examining negatives, and this I usually make use of, standing a few yards away.

A cloudy sky also answers the purpose very well, and then again white blotting paper, placed behind the negative, or even the cover of the plate box, providing it be white, as it is in the case of Imp. Sp. Plates.

Sometimes I intensify the negative, and this often causes a shadow to show up better than it did previously.

Of course I rely only upon the negative for the interpretation of the result, as a very faint shadow just discernible in the negative might be missed altogether in a print.

Since I read this paper I have obtained two more positive results, making a total of sixteen cases altogether, being one under the largest number of positive results so far recorded, an account of which appeared in the "Annals of Surgery" last year, by Leonard, of Philadelphia.

One of these cases had been subjected to the rays previously, and missed, no doubt, owing to the fact that the calculi present were composed of uric acid. Three skiagrams of this case revealed faint shadows, all of which corresponded, and therefore made the diagnosis certain.

The other case appears in the illustration, showing a heart-shaped calculus in the pelvis of the right kidney.

In this case the patient was thin and anæmic, and the exposure given was only three minutes.

NOTES ON AN EPIDEMIC OF TYPHOID FEVER IN BRIGHTON, VICTORIA.

By William Macansh, M.B., C.M. Edin.
L.R.C.P. & S. Edin., Brighton, Victoria.

I DESIRE to-night to bring before your notice a few notes concerning an outbreak of typhoid fever in the town of Brighton during the early part of the year 1901. During the four years that I have seen the reported cases they have been:—1898, 11 cases of typhoid; 1899, 9 cases; 1900, 5 cases; 1901, 35 cases. The first case was reported in January—1st on 21st January, 9 days ill; 2nd on 26th January, 30 days ill; 3rd on 2nd February, 10 days ill; 4th on 3rd February, 14 days ill; 4 cases on 6th February, from 4 to 15 days ill (one 4 days, two 7 days, one 15 days); 1 case on 8th February, 4 days ill; 1 case on 10th February, 16 days ill; 1 case on 10th February, 14 days ill; 2 cases on 12th February, 7 and 4 days ill. Reported—6 cases on February 13, 8, 7, 8, 7, 4, 5 days ill; 2 cases on February 18th, 4, 4 days ill; 1 case on February 21st, 10 days ill.

We had thus reported between the 21st of January and the 21st of February 22 cases.

No cases were reported until March 19th. From March 19th to the 28th six more cases were reported, when we had another period without fresh cases until April 11th and 12th, when we had three more cases.

Thus out of the 35 for the year, 31 were reported between January 21st and April 11th.

In all cases the water supply was from the Yan Yean, and in a few of the cases the water was always boiled.

The milk was boiled in a majority of the cases, and included most of the dairy supplies in the town, including the bottled and concentrated milk supplies.

The houses were inspected without finding any insanitary conditions to account for the outbreak. In my report to the Council at the time I stated that we were unable to find any common cause for the outbreak, but that I felt convinced that we could rest assured that the dairies were not at fault. We were unable, on inquiry, to find any source of food supply that was common to the different patients, and that although a few used only boiled water, I felt suspicious of the water supply as being the cause. Since then, from a careful study of a map of the water reticulation, I am not nearly so suspicious of it as I was. And in view of the fact that in at least three of the cases the water was boiled, and in two a Jeffries' filter or

a Pasteur filter were used, the case against the Yan Yean is weakened.

Since we now have it proved that the urine of typhoid patients in about 30 per cent. contains the typhoid bacillus, and as the bacillus may be found in the urine months after the patient has recovered, I think that in all probability the origin of such an epidemic as occurred in Brighton was in the system of open sewers for our liquid excreta.

Brighton, as you are aware, is situated on the southern side of Port Philip, and the drainage goes directly into the bay by means of four main drains, which run each in the centre of a valley, and act as drains for surface water for a considerable area of land beyond the town boundaries. Of the thirty-one cases which occurred, twenty-two were within the drainage area of one of these main drains. And it was at the head of the channelled portion of the drain that the first case, and that a fatal one, occurred. This case was an imported one. He was reported on January 21st as nine days ill, but he came home from Lillydale, where he had been working for months, because he felt ill. Of the twelve cases reported up to February 10th eight were in houses situated either immediately facing this drain or the patients walk alongside of the drain on their way to and from the railway station or the State school.

The drains are swept at least once a week, and unless there is a considerable amount of filth it is allowed to dry alongside the gutter, and the wind bloweth the dust whither it listeth.

On January 19th, 1901, the temperature was 95°, wind N.W.; on January 20th the temperature was 84°, wind N.W.; on January 23rd the temperature was 84°, wind S.E.; on January 24th the temperature was 89°, wind S.E.; on January 25th the temperature was 94°, wind N.; on January 26th the temperature was 86°, wind N. Allowing ten to fourteen days for incubation, and the days ill before reported, it is, I think, highly probable that our outbreak was a dustborn epidemic.

The Journal of Obstetrics and Gynaecology of the British Empire. An advertisement in connection with this *Journal* will be found on page xxviii. of our advertising columns. We understand that no expense is being spared to make this publication worthy of the name it bears.

THE Public Library of New South Wales requires the following numbers to complete its file of the *Australasian Medical Gazette*:—Vol. 2, No. 3, December, 1882; vol. 5, No. 6, March, 1886. Address: Librarian, Public Library, Macquarie Street, Sydney.

CLINICAL AND PATHOLOGICAL NOTES.

"An Obscure Case."

THE case described by Dr. Blackburn in page 186 of the *Australasian Medical Gazette*, is most interesting, and vividly recalls a few cases which have occurred in my own practice. Some years ago Dr. Foster, of Wahroonga, met with a similar case. The great feature of the case appears to me to be collapse of the circulation and collapse of nervous action, and I do not think the circulatory collapse can explain the defective neuronie energisation. My own belief is that the disturbance is largely concentrated in the vagus centres and paths. The sighing breathing might be attributed to the defective cardiac action, but in some of these cases the respiratory process has been irregular, and the pauses have been disturbed in a way which is more common in meningitis; but which I admit may happen from cardiac causes. The condition is one which is not uncommon in young infants suffering from gastro-enteritis—pseudo-meningitis or the hydro-cephaloid state. It is possible that some of these cases are really megrimous in nature. Dr. Gee, long ago in the St. Bartholomew Hospital Reports, wrote of cases of "recurrent vomiting," which were of the same nature as sick headaches, the headache not occurring. Certainly in some cases of what I have diagnosed as this periodic disturbance, the collapse has been great both in circulation and nervous action, with retracted abdomen, marked vomiting, dry tongue, and apyrexia.

I am not going to be so dogmatic as to assert that Dr. Blackburn's case is one of this class, but given such a sensitive nervous mechanism the exciting causes need not be very intense.

ANGEL MONEY, M.D., F.R.C.P., Lond.

Sydney.

Epidemic Catarrhal Jaundice.

THIS summer a small epidemic of jaundice occurred in this district, which appeared to have a distinctly infectious character, and in its symptoms to differ from ordinary catarrhal jaundice due to food.

The cases occurred on a station which forms an isolated community, some distance from this town, and about five miles from the nearest township.

The first person attacked with a febrile condition, followed by jaundice, was one of the

maids. When she was convalescent she went home, a few miles away, and a fortnight afterwards all her family developed the same illness. About the same time one of the children at the head station became ill; he was feverish for over a week with marked debility and loathing for food. His mother fearing typhoid took entire charge of him, disinfecting his excreta herself. At the end of a week his temperature fell to normal, and jaundice manifested itself. Then the lady of the house, herself, became ill, feeling extremely weak, with absolute loathing for food, and very severe pain across the middle of the back; the temperature for three or four days was about 101° in morning, going up to 103° at night. It gradually fell, reaching normal about the ninth or tenth day, when the jaundice appeared, and patient gradually improved. Next, the maid, who waited on her, began to get ill in a similar manner. She was freely purged, and after five days was better, without getting jaundiced.

Two children, who sometimes visited the station, also had jaundice after this. A few isolated cases, with somewhat similar symptoms, also occurred in the district, but I can trace no connection between them and the cases on the station.

From this account a distinct infection from one individual to another, seems to be apparent, and the disease is quite different to ordinary catarrhal jaundice, due to errors of diet.

There appears to be an incubation period of about a fortnight, the febrile symptoms, of variable severity last about a week, with local manifestation in the stomach, which usually spreads to the bile ducts, but perhaps may not necessarily do so. Neither influenza nor dengue were present in the district at the time.

There is a considerable resemblance to the epidemic in Derbyshire, described by Dr. Peck, and if that were really Weil's disease, as he says it is, this may be so too, but I would be reluctant to give it that name without having further particulars of the disease described by this physician. The only account available to me is in Taylor's Manual, which is too brief to allow one to express an opinion.

E. A. FALKNER, F.R.C.S., ENG.

Toowoomba.

A Case of Rupture of Abdominal Wall in Ascites.

CASES of spontaneous rupture of the abdominal wall are, I believe, of sufficient rarity to warrant my recording this case, which I saw

for Dr. Marten, who kindly asked me to continue in attendance.

I found a man, aged 55, in bed, with his clothes and bedding saturated. He stated that his abdomen, which had been increasing in size for several years, had burst, and fluid had been escaping for about three hours.

At the lower part of an umbilical hernia there was a small opening admitting a probe, and out of this ran ascitic fluid. The tissues in the immediate vicinity of the opening were discoloured, and the hole was no doubt caused by the sloughing of the skin at the cicatrix of the umbilicus. The abdomen was now quite flaccid, and contained but little fluid. The liver was plainly felt extending about three inches below the costal margin, and to the left of the midline. The spleen was enlarged. The external genitalia and legs were very oedematous. There was mitral incompetence, bronchitis, and fluid at both bases posteriorly. The pulse was intermittent. The umbilical hernia was easily reduced and kept in position by a pad and strapping, which also prevented the escape of ascitic fluid. The patient improved for about a week, being much relieved by the now lessened abdominal pressure, and the oedema of the external genitalia and legs decreased.

He refused to keep his bed, and was up and about until eighteen days after the rupture, when he died from bronchitis and cardiac failure; at no time did he shew any signs of peritonitis, which is stated to be the usual cause of death after rupture.

Spontaneous rupture of the abdominal wall in ascites must be rare, and by most medical writers is not mentioned.

Fagge, vol. 1., p. 298, 1886 ed., says in speaking of its occurrence, that Sir W. Jenner has recorded a case in which (no doubt from the presence of air as well as fluid) the rupture was heard at a distance from the patient's bed.

The *Medical Review* of last year records a case, but in this instance paracentesis had been performed twenty-five times, whereas, in my case, the patient had, from the advice of his friends, previously refused treatment of any kind.

Death is the usual result of rupture, and occurs early from peritonitis.

The site of the rupture is usually at a spot where the skin is thinnest, and as rupture is, as a rule, preceded by an umbilical hernia, the abdominal cicatrix must become very attenuated.

A. M. CUDMORE, M.B. Adel,
F.R.C.S. Eng.

Adelaide.

MIRROR OF HOSPITAL PRACTICE IN AUSTRALASIA.

PRINCE ALFRED HOSPITAL,
SYDNEY.

A CASE OF PRIMARY TUBERCULAR ULCER OF
THE STOMACH.

(Under the care of Mr. Critchley Hinder,
Honorary Surgeon.)

FOR the following history I am indebted to my house surgeon, Dr. E. H. M. Stephen:—

The patient, a man of 39 years, came to the hospital complaining of frequent vomiting. He had not been feeling well for the past six months, but his gastric symptoms clearly commenced five months ago. Previous to this he has had no gastric trouble at all. The vomiting occurred usually once or twice during the day, about a half to one hour after taking food. The amount vomited corresponded with the amount of food he had taken. There was never any blood nor any material like fresh or old blood in the vomit. His pain was sharp and cutting at times, and aggravated by the taking of food, though at times he had pain when no food had recently been taken; was relieved by vomiting, and was always situated in the epigastrium, which he himself felt to be rather tender. For the past two months he has been troubled by flatulence. He has lost weight rapidly to the extent of over three stone during the past three months.

His past health has been good, he has had no cough nor any evidence of tubercle elsewhere. He has never been troubled with dyspepsia, but his bowels were inclined to be rather loose when in ordinary health. He knows of no tubercular trouble among his relatives. His temperature has been normal while in the hospital for the last few days.

The man is somewhat emaciated, though he was a spare built man when well. His chest is clear. His vascular system shows no pathological sign. An inspection of his abdominal walls reveals nothing. There is no distension, and with deep inspiration, no abnormality is observed. On palpation there is marked tenderness to the right of the mid-line in the pyloric area, and his abdominal walls in this situation are somewhat rigid and tense. Nothing is palpable beneath this area. Percussion shows some increase of stomach resonance, the greater curvature being lower than usual in a patient with an empty stomach.

The abdomen was opened, and almost all the small intestines were found collapsed in the pelvis. The intestines were carefully examined throughout, every inch was actually handled, and no pathological condition could be discovered. The first part of the duodenum with about three inches of the adjacent stomach wall was somewhat matted up with omentum, and possessed an irregular surface. Over this area too, and along the greater curvature were numerous miliary tubercles. These were more plentiful along the border near the vessels and, becoming more scattered, disappeared about two inches from the border. Some of the adjacent glands showed signs of caseation. On palpation an irregular ulcerated surface could be felt in the anterior wall of the stomach, involving the pylorus, and passing round to the posterior wall. The thin base and the raised edges could be defined without difficulty. The stomach and duodenum in this situation were firmly attached to the pancreas and adjacent structures, so that removal was not possible.

Gastro-jejunostomy was performed, the jejunum being attached obliquely and from above downwards to the anterior wall of the stomach by means of a running suture of catgut. The further progress of the patient was uneventful. He left the hospital with instructions to live almost entirely on milk for two months. He had no pain, and expressed himself as feeling very well.

Tubercular ulceration of the stomach is undoubtedly very rare indeed, more rare in fact than the published reports would lead one to believe, for some of these cases were diagnosed as tubercular ulcers, because there were symptoms of pyloric stenosis during the course of a phthisical condition of the lung, fair evidence perhaps, but not exactly precise.

Primary tubercular ulcer of the stomach is even more rare. By primary one can only mean that it was not possible to discover clinically the presence of tubercle elsewhere in the body.

Simmonds found only eight specimens of tubercular ulcer of the stomach in two thousand tuberculous subjects. Steiner and Neureutter met with four instances among 302 autopsies on tuberculous children. Widerhofer found it twice in 418 cases. Soltan Fenwick records only two cases out of two thousand autopsies on patients suffering from pulmonary phthisis.

Ewald states that the appearance of tubercular ulcer of the stomach, without any evidence of affection of the rest of the digestive tract is rare. Marfan collected a series of

cases, but many of them were open to considerable doubt.

Most of the cases recorded were associated with tubercular disease of the intestinal canal, and the stomach appeared to have been affected secondarily to the intestine. Many of them were children, and they doubtlessly would be more likely to suffer owing to the vast quantities of bacilli they swallow with their sputum.

In all the cases the ulcer is situated towards the pyloric end.

The stomach is undoubtedly peculiarly exempt from tuberculous disease, and this may be attributed to two causes. In the first place, the acid secretion of the organ is peculiarly inimical to the growth of tubercle—(Koch), and in the second place, there is very little lymphoid tissue in the stomach.

Both Samuel and Soltan Fenwick, Klebs and Leube deny the existence of primary tuberculosis of the stomach or intestines; but Bollinger, Eisenhart, Melchoir and Wyss have established the fact on a sound experimental basis.

In this case, I have recorded, it is of course impossible to say that there is not tubercle elsewhere, but there was certainly no macroscopic evidence of it in the abdominal cavity, and no clinical evidence in the lung or any part of the body.

ADELAIDE HOSPITAL, S.A.

DOUBLE HYDROCELE IN A YOUTH. OPERATION FOR RADICAL CURE.

(Under the care of LEONARD W. BICKLE, F.R.C.S. Edin., Hon. Surgeon.)

W.H., *et* 17, born in South Australia, was admitted into Victoria Ward on February 5th, 1902, complaining of swollen testicles and swelling of abdomen. On examination the left tunica vaginalis was found distended with fluid; the neck of sac felt in the usual way, and appeared in every way to be a typical hydrocele. The right presented several peculiarities. The tunica was evidently full of fluid, but no definite neck could be made out. The tumour could not be emptied of fluid and was evidently connected with the abdominal swelling. The abdomen presented the appearances of a general ascites. There was a marked thrill, the navel was protruded, and the fluid seemed to change its position somewhat on turning the patient on to his side. The heart was normal, the urine normal, and his general health so good that dropsy of cardiac or renal origin was excluded, and also tubercular peritonitis. The urine was passed

normally, so that an over-distended bladder was negatived. Although the fluid changed its position to some extent on moving patient, it gave the sensation of not being free in abdomen—in short, of being encysted.

The diagnosis lay between an abdominal hydatid communicating by some means with right tunica vaginalis, or an immense hydrocele. On further enquiry it was elicited that the right tumour had been tapped twice, and each time the abdominal swelling disappeared.



Last tapping five months previously.

Under chloroform the right swelling was opened. On compressing sac over the external ring the lower part readily emptied. On relaxing pressure the sac filled at once from the abdomen. Efforts were made to collect and measure the fluid, and over 150 ounces of fluid were collected; probably nearer a pint than half-a-pint escaped, so that the hydrocele contained fully a gallon of fluid. The sac was stitched to the edges of scrotal wound and a drainage tube inserted. The left sac was tapped and found to contain some fourteen ounces fluid. Recovery was uneventful; after a few days the contracted sac on right side could be readily made out through the abdominal walls.

Subsequently the left sac was subjected to operation. The sac, which was enormously thickened, and of wash leather consistence, being freely excised.

Remarks.—Large hydroceles in old people are not unfrequently met with, and also double

ones, but I have never before seen a double hydrocele in so young and healthy a man, nor have I ever seen one extending into the abdomen. There is a history of an injury to right testis three years since.

The illustrations give a fairly good representation of the case. In figure I. the swelling on the right side can be seen above the hair extending up through the rings.



Figure II. shows the tension existing when in the upright position; also the rounded outline of the abdomen with the protruding navel, so characteristic of fluid in abdomen. At the bottom of the scrotum the outline of the right testis is very clearly to be seen.

REVIEWS AND NOTICES OF BOOKS.

ATLAS AND EPITOME OF OBSTETRIC DIAGNOSIS AND TREATMENT. By Dr. O. Shaeffer, of Heidelberg. From the Second Revised German Edition. Edited by J. Clifton Edgar, M.D., Professor of Obstetrics and Clinical Midwifery, Cornell University Medical School. With 122 coloured figures and other illustrations. Philadelphia and London: W. B. Saunders and Co., 1901. Cloth, 15s. Melbourne: J. Little.

This volume contains in the compass of some 300 pages a goodly collection of interesting facts, but not much that is new. Its special recommendation lies in its presenting the subject to the eye in a pictorial manner. It is rich in lithographic plates, all of which, though semi-diagrammatic, are very good.

There is a text, as a current comment on the illustrations, covering a large part of the subject. This is written in good style; but the promise of the title page—"Special reference to treatment"—is hardly justified, for the space given to treatment is

often brief and, it must be said, not always satisfactory. We do not, for example, like the bald counsel given under *Eclampsia* (the treatment of which is disposed of in some twenty-five lines), that three grains of morphine may be given in "four to seven hours," the weighty name of G. Veit notwithstanding. It is better to give this and other important drugs "with brains," after the manner of the artist, and watch physiological results, than thus to measure them out in the style of the apothecary. Again one finds with surprise, under "*The Treatment of Tubal Gestation*," the statement that a patient with "severe hæmorrhage," or where the shock is "too profound, must not be deprived of the extravasated blood." This is a hard saying.

Apart from these slips, however, the book can be recommended as a very good atlas of midwifery, the technique of the art being copiously illustrated, and the text full of important clinical information.

A. W. M.

ATLAS AND EPITOME OF LABOR AND OPERATIVE OBSTETRICS. By Dr. O. Shaeffer, of Heidelberg. From the Fifth revised German edition. Edited by J. Clifton Edgar, M.D., Professor of Obstetrics and Clinical Midwifery. Cornell University Medical School. With 14 plates in colours, and other illustrations. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, 10s. Melbourne: J. Little.

This is an excellent atlas of operative obstetrics. It is unfortunate that the present regime of study affords all too little opportunity to the average medical student of acquiring a practical knowledge of obstetric operations; and therefore such assistance as this atlas can give will be specially welcome to the young practitioner, who frequently has to bear alone the burden of the most important emergencies. It can be heartily recommended.

The text in explanation of the plates is fairly good and clearly put, as far as it goes. It deals first with the act of parturition, from the standpoint of the practical obstetrician, and secondly with the operations of midwifery. A good index renders the volume readily available for reference.

A.W.M.

A TEXT-BOOK OF PHARMACOLOGY AND THERAPEUTICS. Edited by W. Hale White, M.D., F.R.C.P., Physician to and Lecturer on Medicine at Guy's Hospital, London. Edinburgh and London: Young J. Pentland, 1901.

The editor of this text-book, in his preface, tells his readers that it is not a book on *Materia Medica*; doses, prescriptions, the composition of drugs, etc., are generally omitted, because it was felt that every one likely to make use of the book would be sure to possess a *Pharmacopœia* or a book on *Materia Medica*. Further, no attempt has been made to deal with purely surgical therapeutics. We must say that we think the editor has done wisely in making these omissions, and has succeeded, with the help of his well-known colleagues, in producing the best book on the subject in the English language.

The arrangement of the contents is somewhat different from that usually followed in this class of work. The work opens with an introductory chapter on the relation between chemical constitution and physiological action, from the pen of Mr. Hopkins, the lecturer on chemical physiology at Cambridge, and gives in a concise but clear manner the most important of the ascertained facts in this line of chemical research. A

chapter on *Organotherapy*, by Dr. Hector Mackenzie, includes, of course, all that is practically important in the action on the human body, of preparations of the following organs of the lower animals: Thyroid body, suprarenal, thymus, spleen, pituitary body, ovary, testicle, and bone marrow. Dr. Washbourne deals with the subject of growing importance in recent times, included under the term "*Serum Therapy*." He gives a good account of the diphtheria antitoxine, discussing its mode of preparation and standardisation, and its therapeutics. He also treats fully the direct effects of its administration, and the ill effects which have at times followed upon its use. The treatment of tetanus, hydrophobia, plague, typhoid fever, tuberculosis, and general septic conditions by means of sera, is dealt with in a brief but satisfactory manner.

Perhaps one of the most striking features of this work is the inclusion of some very useful though concise articles on special branches of therapeutics. Thus a chapter on massage, by the editor, gives the methods usually adopted, and the indications for and against this mode of treatment. The subject of venesection, too, which, we think, has been allowed to fall too largely into disuse is treated of in a very clear manner, and the many conditions in which this treatment is beneficial are explained. Dr. G. V. Poore contributes a special article on the treatment of heart disease by rest, exercise and baths. The chapter on climate and health resorts in Europe is written by Dr. Michael Foster, and an additional chapter on the health resorts of America is by Dr. Solly, of Colorado Springs, U.S.A. The work concludes with a summary of the uses of electricity in medical and surgical diseases.

We can confidently recommend this work as one of special usefulness to the student of medicine, as well as the general practitioner, as the information is well up to date, and includes references to all the best methods of treatment.

G.E.B.

MANUAL OF SYPHILIS AND THE VENEREAL DISEASES.

By J. N. Hyde, M.D., Prof. Skin and Venereal Diseases, Rush Medical College, Chicago, and F. H. Montgomery, M.D. Philadelphia: W. B. Saunders and Co.; Melbourne: J. Little.

This book very well bears out what is indicated in the preface. It, in many places, cursorily, but yet with sufficient detail for the general reader, compresses most of the essentials of syphilis and venereal diseases in the volume before us. A few of the minor details might be open to controversy. One would hardly think that it is necessary to sterilise the skin before applying mercurial inunction. However, the suggestion is probably in sympathy with the sterilising fashion which pervades medical and surgical practice, and is not to be taken too seriously. The treatment of cowperitis with abscess makes mention of external incision, a method likely to be followed by urethral fistule. Free incision through the floor of the urethra, with the assistance of a urethroscopic tube is infinitely preferable. It is worthy of note that the authors place particular stress on the part taken by toxins and organisms in the production of catheter fever. The treatment of the urethral abrasion by means of which the toxins gain an entrance to the general circulation is of importance, inasmuch, as abrasion is unavoidable, and the treatment of the abrasion, immediately after catheterization, with a solution of silver nitrate is in many cases possible, and productive of excellent results. The book is a good book of its kind, and to be recommended.

H.C.H.

THE AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, 20TH MAY, 1902.

FEDERAL MEDICAL DEFENCE.

ALTHOUGH the motion brought forward at the recent congress at Hobart advocating the formation of an Australian Medical Association was lost, we are glad to note that the spirit of federal medical defence is growing stronger throughout the States of the Commonwealth. The profession is beginning to realise that concerted action and reciprocal relations between the medical societies in the different States is becoming a matter of urgent necessity. We are threatened by various evils, and it will be a matter of necessity for the profession throughout Australasia to stand together if we are to maintain our professional status and right of "freedom of contract."

In Tasmania the establishment of a strong Branch of the British Medical Association will, we hope, soon be accomplished, and as a preliminary step in the direction of unity of action amongst the medical men of that State, the Medical Defence Union of Tasmania has been formed, and already has made very satisfactory progress. In Hobart there is a medical section of the Royal Society of Tasmania, which embraces the Hobart practitioners, but this is not in organic union with any other professional association. In Launceston there is a sub-branch of the Victorian Branch of the British Medical Association, but the long distance between Launceston and Melbourne renders the connection between the two centres practically useless. The organisation of the profession throughout Tasmania in one Branch of the British Medical Association would be of great benefit to all the practitioners in that State, and would bring them into direct line with the profession in the other States. This

becomes the more necessary in view of the recent attempt to resuscitate the Australian Natives' Association, and the formation of new branches of that society in Tasmania.

In Victoria the old established Medical Society, which has hitherto restricted its attention almost exclusively to purely scientific matters, is beginning to realise that ethical questions cannot be entirely excluded, and, though it bears a different name, we believe that every member of that society is in full sympathy with the Branches of the British Medical Association in Australia in their endeavours to defend the profession from the attacks made upon it from different quarters. The Medical Defence Association of Victoria is a vigorous body which is binding together all the members of the profession in that State, and we know that it has already rendered useful assistance to the New South Wales Branch of the British Medical Association in their action against the Australian Natives' Association. In the other States the Branches of the British Medical Association are strong and active organisations, which are gaining in influence every day. But for successful organisation and reciprocal relations between the different States, it is essential that there should be one journal, recognised as the official representative organ of all the medical societies in the States, a medium for the dissemination of information on all questions of professional interest, and for the making and guidance of medical policy in the Commonwealth. With certain necessary modifications, we think, the *Australasian Medical Gazette* could be made to fulfil these requirements, as it has now the largest circulation of any medical journal in the Southern Hemisphere. To this end we shall be pleased to receive and consider any suggestions offered; and in the meantime it will be the aim of this journal, as far as possible, to further the organisation and consolidation of the profession in Australia.

PESTIS MINOR.

At the recent Congress at Hobart, on the motion of Dr. BURNETT HAM, a resolution was passed that the term "Pestis Minor" should not be applied to non-plague cases. This resolution, apparently so obvious, was necessary in view of the reported statement of SIR JAMES GRAHAM, late Mayor of Sydney, that the disease known as "Pestis Minor" was not true plague; and on the strength of this statement, the public of Queensland were at first disinclined to believe that the disease which was prevalent in Brisbane and some other towns in that State, was true bubonic plague. The origin of this confusion of terms would appear to have been in an article in the *British Medical Journal*, of November 23rd, 1901, giving an account of a case of suspected plague at the West London Hospital. This case was examined by several experts, who all agreed in its being a most suspicious case of true bubonic plague, but the bacteriological investigation by Dr. KLEIN negatived this view. The reporter proceeds to state:—"The diagnosis of pestis minor was probably the correct one, the expression 'pestis minor' being understood to mean not a mild case of true plague or pestis ambulans, but a specific form of glandular enlargement, which occurs when plague either threatens or is actually about." It is true that cases of glandular enlargement with slight fever and constitutional symptoms do occur coincidentally with, or as fore-runners of, epidemics of plague, but there can be little doubt that these are cases of true plague of a mild type. We have an analogy to this in the prevalence of very mild cases of scarlet fever presenting only the symptoms of tonsillitis during an epidemic of that disease; and we know how frequently under these circumstances an attack of scarlet fever may be overlooked at first, and only recognised on the occurrence of post-scarlatinal dropsy.

Clearly, the term "pestis minor," if used at all, must be applied only to mild cases of true bubonic plague, and not used to describe any form of non-venereal glandular enlargement, which is proved by bacteriological examination not to be due to the bacillus pestis. But we think the term should be abandoned altogether if it lead the public to view the occurrence of mild cases of plague as not of much importance, and to consequently neglect to use those sanitary precautions, and to adopt such preventive measures as bitter experience has taught us, to be absolutely essential in successfully dealing with an epidemic of such a serious disease as bubonic plague. "Familiarity breeds contempt" is an old proverb, and judging by the revelations recently made in Sydney and suburbs, it would seem to hold good as regards the present epidemic of plague in this city, and as if all the experience of the past epidemic has, to a great extent, been lost. The general panic has subsided, and in spite of the warnings repeatedly made by the Health Authorities, many householders remain supine and indifferent. The general public must be aroused more and more, and kept alive to the dangers of an even more severe epidemic than the previous one, and the use of any term which is calculated to lull house-holders to sleep over rat-infested premises is to be earnestly deprecated.

THE MONTH.

Travelling Expenses for Medical Witnesses at Coroners' Inquests.

IN consequence of the frequent complaints of country practitioners as to the inadequacy of the allowance for travelling to Coroners' inquests, the honorary secretary of the New South Wales Branch of the British Medical Association has had an interview with Dr. Ashburton Thompson, the medical adviser to the Government, whom he found to be quite in sympathy with the medical profession in the matter. Dr. Thompson has promised, on receiving a statement of the case from the Council of the British Medical Association, together with some specific instances of the harsh incidence of the Act of Parliament, to

make a recommendation to the Government that the remuneration for attending the Coroners' courts should be somewhat on a similar scale to that allowed for attendance on police cases. Medical practitioners residing in the country are requested to furnish the honorary secretary of this Branch, without delay, with instances where the remuneration has been felt to be inadequate.

The British Medical Association's Conversazione.

As announced at the last meeting of the New South Wales Branch of the British Medical Association, the Council have decided to hold a public conversazione some time next month. The Senate of the University have graciously granted the use of the University buildings for the occasion, and arrangements are now in progress to make this an occasion for all the members of the Branch, their wives and friends, to meet together for social intercourse. It is hoped that the new State Governor and suite will be present. The arrangements will be carried out by the Council, and invitations will be issued in due course by the President and Council of the Branch. Any member who does not receive an invitation in due course should notify the hon. secretary, 121 Bathurst Street, Sydney.

Sanatoria for Consumptives in Victoria.

A deputation representing the executive committee of the Association for the Prevention of Tuberculosis asked the Minister of Public Health recently to help the association in getting sites for the establishment of sanatoria for the treatment of consumptives. Sir Samuel Gillott said it was understood that the Public Health Department had undertaken to inquire into this matter, and the deputation wanted the department to hurry the business on. The association expected the Government to provide sufficient land for the purposes. Dr. Jamieson said tuberculosis caused 1,800 deaths a year in Victoria. The existing sanatoria, at Echuca and Macedon, could accommodate only 1 per cent. of the patients. Mr. Morrissey promised to discuss the subject with Dr. Greeswell, and in the meantime the committee could assist by suggesting suitable localities.

The Adelaide Medical School.

We are glad to notice that after the troublous times through which the medical school at Adelaide, South Australia, has passed in recent years, it shows signs of taking on a new lease

of life, and already work has commenced at the new building about to be erected in connection with it. The building is to be constructed at the northern end of the present site, and should be completed at the beginning of next year. It will be of a plain character, with cut stone and brick dressings. The suite of rooms include a dissecting room, 80 ft. x 32 ft. x 17 ft., having an open timbered roof and lantern lights, surrounded by a 6 ft. dado and opalite tiles; a mortuary, 34 ft. x 22 ft. and pathological museum, 96 ft. x 32 ft. x 17 ft., with glass cupboards running the whole length of one side, while provision is made for additional apartments if required. There is also an articulating room 21 ft. x 14 ft. 6 in. In addition there will be erected rooms for the professors and students and the necessary lavatory accommodation. The walls will be sufficiently strong and stable to allow of the building of another story should it be wanted. Mr. C. Martin is the contractor, and Mr. F. J. Naish the architect. The school is to cost £5,300.

The Medical Profession and the A.N.A.

A pamphlet, issued some months ago, "by authority of the Western Australian Medical Defence Union," evoked an animated discussion at the sitting of the A.N.A. Conference at Perth last month. The pamphlet, it was stated, contained allegations to the effect that the A.N.A. was an Association of "sweaters," and that it was endeavouring to bring down the status of the medical profession. The board of management of the Association had consulted Mr. F. W. Moorehead, solicitor, who had given the opinion that portions of the pamphlet was distinctly libellous. Several members of the Conference urged that an action at law should be taken against the Medical Defence Union if it were found that that body was incorporated, and hard words were used against those few doctors who were believed to be the authors of the pamphlet. On the other hand, it was urged that the reputation of the A.N.A. was capable of withstanding the allegations of a few medical men, and that the objection to the A.N.A. by the medical profession was in itself a recommendation for that body to the generality of the public! One member of the Conference defended the right of the doctors to unite for their mutual benefit and protection. Ultimately the Conference decided not to risk the costs of a Supreme Court action, and to allow the matter to drop. At Burnie, Tasmania, over forty names were enrolled for the formation of a branch of the A.N.A., but the doctors of the town

would not act as medical officers. They contend that there are already four friendly societies there. In compliance with the wish of a deputation which waited on them the doctors consented to act, but now all the chemists decline to dispense medicines for the branch there as matters stand at present. We congratulate the chemists on the stand they have taken, and trust that the medical men in Burnie will see that it is not to their best interests to act as medical officers to the A. N. A.

The New South Wales Medical Union and the A.N.A.

At a meeting of the Council of the Union held on April 9th, the following resolution was carried unanimously:—"That the Australian Natives' Association be declared a Society prejudicial to the interests of the Medical Profession; and that a copy of this resolution be forwarded to every member of the Union." Rule 3 contains a paragraph as follows:—"Where any society, syndicate, or organisation exists, having among its objects the affording of medical aid to its members, or to the public, or both to its members and the public, and the Council shall by its resolution, have decided that such society, syndicate, or organization is prejudicial to the interests of the Medical Profession, no person pecuniarily interested in, or otherwise connected with such society, syndicate or organization, shall be eligible for membership of the Union, and if such person be a member, he may be expelled in the manner provided by Rule 11."

Hospital Saturday Fund in Sydney.

The annual hospital Saturday collection was taken up in Sydney on May 3rd, and the amount collected in the streets reached a total of over £3,879. The total receipts for the year, which includes the industrial collections, were £4,348. This is an advance on last year's collection, and the money thus collected will be a welcome addition to the funds of all the hospitals. The ladies who devoted their energies to the work at much personal inconvenience, deserve the thanks of the whole community, and specially of the poorer classes, who benefit most by the hospitals.

Hospital Saturday at Toowoomba, Queensland.

On May 3rd, the Hospital Saturday collection was made at Toowoomba, Queensland, and the sum of £142 was collected in spite of an attempted boycott of the hospital by some members of the local Friendly Societies. It

appears that the hospital committee have refused to elect Dr. Elliott, the medical officer of the Friendly Societies' Medical Institute, to a post on the hospital staff, or to allow him to visit members of the Friendly Societies who may be inmates of the hospital, and consult with the resident surgeon in their cases, if necessary. As the rules of the hospital provide for only four honorary medical officers, and this number is found amply sufficient for all requirements the Committee's action was quite justified. The Friendly Societies, however, threaten to withdraw their support from the hospital, and to establish a Cottage Hospital of their own. We hope that no such action will be taken, and that the Friendly Societies will see the wisdom of heartily supporting the present hospital, and not take up a position which would inevitably lead to the isolation of their medical officer, and their members losing the valuable assistance and services of the present hospital staff.

THE FIGHT AGAINST TUBERCULOSIS IN AUSTRALASIA.

VI.

Western Australia.

In regard to the State of Western Australia the struggle with tuberculosis may be said to have only just commenced. In many recent Acts, notably the Health Act, 1898, an attempt has been made to provide the latest and most up-to-date legal procedure possible; but we are hampered by an imperfect system wherewith to carry out the meaning of the enactments. The fault does not necessarily lie with the Central Board of Health, but rather with the local Boards of Health, since I am afraid that, from laxity and economy, they do not as yet fully appreciate the advisability of spending a little money in order to improve and purify their respective districts.

The Health Act, 1898, was the first real attempt on the part of our legislators to grapple with the formidable problem of sanitation—formidable, especially so, in a rapidly growing and extensive colony, such as this is, where the tendency is to banish from their minds on the part of the "powers that be" all ideas of sanitation when planning their "humpies" or hessian tents in the "bush." Under "The Health Act, 1898," the various Local Boards of Health were empowered to make by-laws, regulating (a) The registration annually of dairymen, cow-keepers, etc. (b) The monthly inspection, cleanliness of all

dairies, milk-shops, etc. (c) The removal or destruction of any diseased cow or other animal which shall be found in any dairy, milk-shop, etc. The application of the tuberculin test is at present optional. (d) The carriage of meat, bread, or fruit in clean covered carts, protected from the sun and dust.

These various by-laws are set out as under :—

All persons carrying on the trade of cow-keepers, dairymen, or purveyors of milk within the district of the Local Board shall register their names and addresses at the office of the Local Board, and shall pay a registration fee for such registration, and receive a certificate thereof in the form of Schedule "C."

1. All dairy farms, milk stores, grazing grounds of dairy cattle, and cattle in dairies, shall be inspected regularly from time to time at least once every month, at any reasonable hour in the day time, or in the case of a cause of inquiry or complaint arising in respect thereof, then such inspection may be made at any time when such business is in progress or is usually carried on. Such inspection shall be made by an Inspector of the Local Board, or may be made by an Inspector of the Central Board, or a person or persons appointed by the Central Board to carry out the provisions of these by-laws, or by any member of the police force.

2. If upon such inspection it shall appear to the person making the inspection that the use of any grazing ground for dairy cattle is likely to be prejudicial to health, by affecting the milk or otherwise, then such person shall forthwith report, in writing, accordingly to the Local Board or Central Board, who may thereupon prohibit the use of such grazing ground.

3. If, upon such inspection as aforesaid, any cow or other animal shall be found to be diseased, the person making such inspection shall cause such cow or other animal to be isolated and removed from all possible contact with all other dairy cattle, and shall forthwith report to the Local Board of the district, and to the Central Board the nature of the disease, description of the animal effected, and the measures taken for the isolation and treatment of such animal. No dairyman or cow-keeper shall neglect or refuse to remove or isolate such diseased cow or other animal, or permit or suffer the same to come in contact with other dairy cattle, after being ordered by the person aforesaid making such inspection to remove or isolate such cow or other animal.

4. Whenever it shall be reported to any Local Board or to the Central Board that any cow or other animal is diseased, then such Local Board or Central Board, after due inquiry, may order such cow or other animal to be destroyed or to be removed from any dairy, milk store, milk shop, or milk yard, and such diseased cow or other animal shall be destroyed or removed in accordance with such order.

5. For the purpose of By-laws 3 and 4, or for the purpose of protecting milk against infection or contamination, a Local Board may, and if required by the Central Board shall, cause the tuberculin test to be applied to any cow or other animal when reasonably suspected to be suffering from tuberculosis. For the purposes aforesaid, the Central Board may cause such test to be made, whether there is a Local Board or not, and may issue instructions to be observed in applying the tuberculin test.

6. All houses, dairies, and cowsheds, in the occupation

of persons following the trade of cow-keepers or dairymen—

- (a) Shall have proper provision for lighting.
- (b) Shall have good and sufficient ventilation.
- (c) Shall be cleansed daily.
- (d) Shall be drained thoroughly and effectually, and in such manner as may be ordered by the Local Board, or if there be no Local Board, then by the Central Board.

(e) Shall have a sufficient supply of pure water.

7. Every milk store and milk shop shall be thoroughly cleansed daily, and every milk yard and dairy shall be kept at all times in a cleanly state.

8. For the purpose of protecting milk against infection or contamination, the following precautions shall be observed and kept :—

(a) The walls, floors, counters, tables, and shelves of all milk stores, milk shops, and dairies shall be kept at all times in a cleanly state.

(b) All barrels, butts, cans, and other vessels used for containing milk or cream, and also all bungs, bung cloths, lids, and other parts thereof shall be thoroughly cleansed and scalded with boiling water or steam immediately after use, and afterwards dripped.

(c) No boiler, tank, steam-chest, or other vessel used for scalding such vessels shall be employed for washing or boiling bed or body clothing, or for any other purpose which might cause contamination or infection of milk.

(d) No milk or cream, or vessel used for containing milk or cream, shall be stored or kept in any dwelling or sleeping apartment, and no such dwelling or sleeping apartment shall have direct communication with any milk store; nor shall any article of clothing be washed, hung up to dry, or kept in any room or place used for storing or keeping milk.

(e) No earth closet, privy or urinal, and no manure, dung, urine, stagnant water, filth, or other refuse shall be in contact with, or within thirty feet of any dairy, milk store, or milk shop.

(f) No swine or other animals shall be kept or allowed to remain within one hundred feet of any room or place used for keeping milk, or storing the same.

(g) No milk from any diseased cow shall be mixed with other milk, or sold for human consumption; and such milk shall not be used as food for swine or other animals until it has been well boiled.

(h) No person suffering from any infectious or contagious disease, or having been recently in contact with, or in attendance upon, any other person so suffering, shall milk any cow or handle any vessel used for containing milk or cream, or take part in any way in the storage or distribution of milk or cream.

(i) When ordered by the Local Board or the Central Board, any sick person shall be immediately removed from the premises of any dairy, milk store, milk shop, or milk yard, by the owner or occupier, in accordance with such orders.

1. No person or persons shall bring or cause to be brought or carried through any street or lane, in any cart or vehicle, any butcher's meat, bread or fruit, unless such meat, bread or fruit be protected from the sun and dust.

2. Every cart or other vehicle, and every construction or covering for carrying and protecting meat, bread or fruit, shall be kept in a clean and sanitary state.

As regards the inspection of butcher's meat, very little at present is done of a satisfactorily comprehensive nature. To my mind, a rigid inspection of all fresh carcasses should be made by competent inspectors, and especially as regards the offal; this can necessarily only be systematically carried out in public abattoirs, which at present are chiefly remarkable for their absence. The inspection of meat, as it appears in the retail shops, has been shown in other countries, to be comparatively useless in preventing the sale of diseased meat.

In Perth and the other larger towns of this State, a good deal remains yet to be done to prevent overcrowding in unsuitable houses or tenements, and in my opinion, the Health Act does not deal in a sufficiently definite and drastic manner with this increasing evil in all rapidly growing towns or districts. Common lodging houses, etc., the dismal dingy rooms of old houses in the elder portions of towns, have been shown, by previous authorities, to be a frequent mode of dissemination of tuberculosis, and I look forward with considerable expectation to a large amount of improvement in the isolation of tubercular patients, and the subsequent disinfection of their rooms and clothes, now that we have secured the passing of an amending Health Act, 1902, which, amongst other benefits, compels the notification of cases of pulmonary tuberculosis; and to still further safeguard the public health, makes it optional for each local board to make a by-law.

For preventing any person expectorating on any made footpath in any street or public place, or on any building to which the public have access or any approach thereto, or on any railway carriage, tramcar or other public conveyance.

If this amending section is at all carried out, I believe that it will do more to diminish pulmonary tuberculosis than all the other regulations together.

It would be useless to attempt to find the phthisical death-rate in this State, and the chief reason which would prevent me even getting approximately near the truth from a statistical point of view, is the rapid changes in the population during the last nine years; in fact, at the present time, Western Australia receives about 3,000 immigrants monthly, and about 1,500-2,000 people leave the State during the same period. It must be obvious that, if for this reason alone, all statistical errors would be very great.

The urgent and pressing need for a Sanatorium for the modern open-air treatment of pulmonary tuberculosis is keenly felt by all

medical men in this State, but especially by one, who, like myself, has spent several years of his professional life in charge of the Brompton Hospital for Consumption. I am afraid that this State is too young, and too poor in public philanthropy for us to expect a well-equipped institution of this kind for some years to come.

Lastly, a few words about the climate in this portion of Australia. There is no doubt that a good deal of misapprehension prevails in many of the other Australian States in regard to the weather we experience here, and I am sorry to say that our climate is generally spoken of disparagingly. Far from this. I am sure that we have as good a climate as most of the States, and one that is a good deal better than some.

In fact, there are many districts within easy reach of Perth which are eminently suitable for the treatment of pulmonary tuberculosis, and I would commend this observation to the notice of my professional brethren throughout Australasia.

NEW PHARMACEUTICAL PREPARATIONS AND INVENTIONS.

"Soloid" Urine Test Case.

Messrs. Burroughs, Wellcome & Co. have recently placed at the disposal of the medical profession a compact and convenient nickel-plated pocket case containing within the limits of $5\frac{1}{2} \times 2\frac{1}{2} \times 1\frac{1}{2}$ inches the necessary apparatus and material for the examination of urine. The "Soloid" Brand Urine Test Case contains an Esbach's Albuminometer, an urinometer, graduated measure, test papers, test tubes and stand, a nickel-plated spirit lamp, together with "Soloid", Brand Fehling Test, picric acid, potassium ferrocyanide and citric acid. Aided by this apparatus, the physician



Design registered.

can, in a few minutes, determine the reaction and specific gravity, and the presence of albumin and of sugar in the urine. The chemicals with which the case is supplied are pure and reliable. Being of accurate weight and readily soluble, they enable the medical man to prepare promptly the requisite solutions, of exact strength and in an active condition. The price of the case, fitted complete and including a doe-skin cover, is one guinea.

BRITISH MEDICAL ASSOCIATION NEWS.

PROCEEDINGS OF AUSTRALASIAN BRANCHES.

New South Wales.

A GENERAL meeting of the Branch was held at the Royal Society's Room, on Friday, 26th April, 1902. Dr. Brady, Vice-President in the chair. There were also present—Drs. Nolan, Shand, Thomas, Hinder, Scot-Skirving, Levy, Ramsay Sharp, Cohen, R. H. Jones, Kirkland, Newmarch, Hankins, H. Browne, Mills, Palmer, Gill, Phipps, McKay, Sawkins, Morgan Martin, Flynn, West, Miles, Bucknell, Megginson, McMurray, Corlette, Agnes Bennett, Fiaschi, Spencer, Binney, Morton, Foreman, Walker-Smith, Terrey, Dick, Maitland, Burge, Gledden, Frisell, Bowker, W. S. Brown, Stacey, Trindall, Barrington, Gordon Craig, P. Sydney Jones, Taylor Young, McPherson, Sandes, McDonagh, Worrall, Clatworthy, Herschell Harris, Mary Booth, Pentland, Kate Hogg, Gordon MacLeod, and others.

The minutes of the previous meeting were read and confirmed.

The CHAIRMAN announced the election of the following gentlemen:—Drs. G. E. Miles, R. D. Heggaton, D. Kerr, J. J. O'Keefe, H. M. C. Dalton, M. H. Atcock, H. Armstrong, A. E. Perkins, H. Blaxland, W. R. Sharp, A. A. King, N. J. Dunlop, and Professor Welsh.

Nominations for Membership.—Drs. H. Terrey (Kiama), J. F. Lovegrove (Rylstone), J. Park (Helensburgh), R. W. H. Maffey (Newcastle Hospital), T. L. Pawlett (Crookwell), M. L. Cameron (Grafton), E. H. Barnes (Muswellbrook), H. K. King (Nowra), W. Middleton (Mittagong), A. O'Connor (Woonona), J. F. Moffitt (Balranald).

The CHAIRMAN apologised for the absence of Drs. Bennie and Crago.

The HON. SECRETARY announced that the Council was arranging to have the Branch recognised as a public body at levees and other public functions, and also that it was intended to hold a *conversazione* early in June, for the members of the profession.

Dr. SCOT SKIRVING read a paper on "The Diagnosis of Erythromelalgia and Raynaud's Disease." Patient exhibited. (See page 225.)

Dr. NEWMARCH read "Some Notes on a Case of Raynaud's Disease." The patient was exhibited.

Dr. MILLS observed that in accordance with the old saying, there was no beating the old dog on a hard road. Accordingly when Dr. Skirving brought any paper before the society there would not be much room for criticism, for Dr. Skirving's knowledge was so good and his experience so wide that he would leave no loophole through which one might fire a shot. At the same time he did not notice any reference in the case of erythromelalgia, which Dr. Skirving had brought before the Branch, to the presence or absence of cord disease, in which we all knew erythromelalgia was a frequent symptom. In his opinion Dr. Newmarch's case was one of localised neuritis, the presence of marked muscular wasting was evidence of this. Whether that was the sole explanation of the symptoms was another question. If he might venture to suggest a remedy, which apparently had not been employed by Dr. Skirving in his erythromelalgic case, he would recommend the use of adrenalin, a remedy which had a most powerful effect

on the vaso-motor nerves. He was pleased that Dr. Skirving once more came to give the Branch the benefit of his ripe and varied experience. Dr. Skirving's catchment area was so large, and the patients flowed to him from that area in such large numbers, and his observations were so correct, that the members of the Branch would always highly appreciate any paper or exhibit that Dr. Skirving brought before them.

Dr. FIASCHI said:—"In all medical communities we generally find an individual who devotes himself to the identification of cases of rare diseases. I think that amongst ourselves Dr. Scot Skirving will soon attain such a distinction. We are greatly indebted to him for having to-night extended our medical knowledge by his description of erythromelalgia, and by the exhibition of this case that he has identified. Dr. Skirving rather summarily dismisses the question of surgical treatment, but I venture to say that in a disease so apparently due to nerve disturbance, nerve stretching might be tried with advantage. Coming to Raynaud's disease, it has been my lot in the Sydney Hospital to apply the *ultima ratio* of such cases when advanced to gangrene, that is, amputation. In so doing I was struck the first time with the great trouble I had to find the blood vessels, owing to their very small calibre, and with the fact that there was very little bleeding, the muscular tissues appearing almost dry. On dealing again with similar cases, I watched for this condition, and invariably I met it again.

Dr. SCOT SKIRVING, in reply, expressed himself as being exceedingly obliged to the members for the kind manner in which they had received his paper. With reference to the remedy proposed by Dr. Mills, he would certainly adopt the suggestion.

Dr. MAITLAND read a paper on "The Advantage of Obtaining Urine Separately from each Kidney, and in Diagnosis of Urinary Disease, and the Method of doing so." (See page 245.)

Dr. HINDER said: Dr. Maitland deserves the thanks of the meeting for having introduced to the members such an interesting instrument as the segregator of Harris. I have used the instrument for some time past, and therefore know its virtues and its faults as well. Notwithstanding Dr. Maitland's glowing account, I think he unconsciously indicates its fallacies very well indeed. The patient with hæmaturia showed dark urine in one bottle, and darker urine in the other, indicating that the watershed was by no means a perfect one. Think what this failure on the part of the watershed would mean in a case of suspected tubercular disease of one kidney. Surgically there are such a number of cases in which the bladder is affected, as well as the kidney, that the segregator is of little value and even misleading. Certainly it ought never to be used except in a clean bladder (that is to say where there is no pyuria) or in conjunction with the cystoscope. There are not more than five per cent. of the cases examined in which it is not possible to examine the urine with the cystoscope as it issues from the ureteral orifice and these are the very cases in which it would be impossible to use the segregator. In some cases, and particularly, I should say, in those which come under the care of the physician, where it is of interest to know the functional capacity of each kidney, the results are as interesting as they are striking. Above all things this is an instrument which requires practically no training to handle. Any man who can pass a sound can pass the segregator and adjust it. It does the rest itself. In many respects it is a very useful instrument, but one must never lose sight of the many avenues by which errors might creep in and stultify one's diagnosis.

Dr. WORRALL said he had listened with pleasure to Dr. Maitland's description of a new method of obtaining the urine from each ureter. As Dr. Maitland proceeded, he (Dr. Worrall) began to think a valuable addition to their resources had been given them by this instrument. He was, therefore, disappointed in a corresponding degree when he heard Dr. Hinder discredit the instrument by saying he had himself tried it, and found it of little value, and with important disadvantages. Further trial would decide its value and scope. With regard to Howard Kelly's method, he (Dr. Worrall) had had brilliant results from it, although he admitted that in certain cases it was very difficult to use. Quite recently, for example, he had failed to find the ureters in a very fat woman, for whom he had done vaginal hysterectomy ten years previously. Again, he thought the suggestion to treat pyelo-nephritis by washing out the pelvis of the kidney by means of a ureteral catheter was carrying the method too far. He thought Dr. Maitland's statement that "it was regrettable that in this matter Dr. Kelly had migrated from the realms of the gynecologist" was absurd. The urinary and genital systems were so intimately connected that the gynecologist who in his daily work ignored the former, would soon arrive at disaster. In the female pelvis they lay in horizontal super-imposed planes, and everyone knew that inflammation and infection frequently passed from one to the other. He had recently had conversations with several gentlemen who had attended Dr. Howard Kelly's clinic, and all testified to the frequency of the examinations of the ureters by this gentleman's instruments, and the value of the results in elucidating difficult cases.

Mr. BARRINGTON said that in surgical diseases of the kidneys in women, where doubt existed as to which side was involved, he had for some time past resorted to Kelly's method of ureteral catheterization, and found it entirely satisfactory. The bladder is emptied after irrigation, the ureteral orifices in turn exposed and cleansed by boracic lotion. When the ureters are so catheterized through an open speculum in an air-distended bladder, he thought it was an absolutely accurate method of securing separated urines and cultures from infected kidneys. Inasmuch as the cleansed catheters were passed directly into the ureters, there was little fear of infecting them from the bladder. He was disposed to modify an old dictum, and apply it to surgical diseases of the kidneys—"When in doubt, catheterise the ureters." This threw light on the state of both kidneys, and would tend to prevent the disappointment of exploring the wrong organ. He held that the investigation of the renal system by catheterization of the ureters in women was quite within the domain of the gynecologist. As in pelvic surgery, an intimate knowledge of the relations of these ducts was ever most important, and it occasionally became necessary to catheterize them as a preliminary operation.

Dr. FIASCHI said:—We are under considerable obligation to Dr. Maitland for his able illustration of this ingenious instrument, and what is more, for his emphatic use of the word *urines*, in the plural. The sooner we realize in practice, that in dealing with a double organ like the kidneys, we have not one urine, but two, and we proceed to collect them and examine them separately, the sooner shall our diagnosis and treatment be placed on a sound basis. I do not agree with Dr. Hinder that such an instrument may be easily used by any medical man. On the contrary, I think that to obtain trustworthy conclusions, a high degree of specialization is required. No doubt there are men who at all times and ages are ready to take up the most

difficult pursuits. Mr. Gladstone, when over 70, began the study of the Basque language, which is considered one of the most difficult languages known. On my part, I acknowledge my limitedness, and would prefer, in cases of doubt, requiring the separation of urines, to avail myself of men like Dr. Maitland, who, by constant practice, have acquired special skill with that instrument.

The VICE-PRESIDENT said that the thanks of the meeting were due to Dr. Maitland for the way in which he had brought forward this important matter, which had given rise to an interesting and instructive discussion. Dr. Maitland had raised objections to the use of Kelly's ureteral catheters because they were so difficult to sterilize. He thought the same objection applied to the segregator shown by Dr. Maitland. It is a tubular instrument with numerous small eyelet holes, liable to retain septic organisms. As a proof of this he would mention—he did not know if the instrument as shown was supposed to be clean—but he had noticed some dried blood in one of the eyelet holes. If we were to accept the remarks of Dr. Hinder as authoritative, "that the instrument could only be used in a clean bladder," its utility would be very circumscribed. Regarding the discussion between the surgeons and the gynecologists over their respective spheres of action in the abdomen, he would remind the former that if it were not for the latter the modern surgery of the abdomen would not be in its present position, and the surgeon should not be too jealous of the gynecologist if he thought he got a little outside his special region. He could speak of the matter without bias, as personally he never dealt "below the belt."

Dr. MAITLAND said that he did not adversely criticise Howard Kelly's methods as a means of examining the bladder nor as a means of catheterizing the ureters, when that procedure was necessary. He only objected to it, as he said in his paper, as method of treatment for hydro and pyo-nephrosis, and as a preliminary to the operation of nephro-lithotomy. He stated that he did not think Dr. Hinder's criticism was fair, as one of the objections, viz., "that each pocket drained the corresponding half of the bladder," was mentioned in the paper, and also that the fact of the cases mentioned not requiring the segregator was also stated definitely in the paper. The cases were chosen, as they proved the reliability of the septum.

COUNCIL MEETINGS.

THE Council met at the Association Room, on Tuesday, 15th April, 1902. Present: Drs. Rennie, Crago, Dick, Brady, Hankins, Fiaschi, Jamieson, Pockley, Foreman, Beeston, Worrall, Hinder, Newmarch, MacCormick.

The minutes of the previous meeting were read and confirmed.

Letter was read from Dr. McClelland stating he had resigned his connection with the Central Mission Retreat. Dr. McClelland to be thanked for so promptly acting upon the suggestion of the Council.

Letter was read from the Secretary of the Central Mission. To be acknowledged.

Letter from the Registered Pharmacist's Society with reference to the action taken by the Branch in the Australian Natives' Association matter. To be acknowledged, and the Society congratulated on their action.

Letter from Hon. Secretary, Northern Suburbs Medical Society, with regard to certain members of the Branch meeting medical men on the confidential list. Resolved that the letter be acknowledged, and the question postponed until next meeting.

Proposed conference with the United Friendly Societies' Association. Resolved that the Council of the British Medical Association is at all times willing to meet representatives of legitimate Friendly Societies, but as the Australian Natives' Association is not considered by the Branch a legitimate Friendly Society, but, on the contrary, inimical to the interests of the medical profession and the Friendly Societies, a conference cannot be held to discuss the relations of the Branch to the Australian Natives' Association.

The PRESIDENT suggested that a social gathering of the whole medical profession should be held at an early date, at the invitation of the Council. Resolved that a conversazione be held in the Great Hall of the University, on a date to be fixed.

Letter was read from Dr. Milne asking for admission to the Branch. Resolved that the views of the North Sydney Medical Society on the subject be ascertained. Dr. Milne to be informed that this step had been taken.

The following sub-committee was appointed to make inquiries with reference to the proposed conversazione. The President, Vice-President, Hon. Secretary, and Hon. Treasurer, with power to add to their number.

Account passed for payment, W. Pepperday, £7 1s. The PRESIDENT reported that steps would be taken to have the Branch recognised as a public body at all public functions.

The Council met at the Association Rooms, on Friday, 9th April, 1902. Present: Drs. Rennie, Crago, Hankins, Newmarch, Jamieson, Worrall, Pockley, and Brady.

The minutes of the previous meeting were read and confirmed.

The following new members were elected:—Drs. H. Terrey (Kiama), J. F. Lovegrove (Rylstone), J. Park (Helensburgh), R. W. H. Maffey (Newcastle Hospital), T. L. Pawlett (Crookwell), M. L. Cameron (Grafton), E. H. Barnes (Muswellbrook), H. K. King (Nowra), W. Middleton (Mittagong), A. O'Connor (Woonona), J. F. Moffitt (Balranald).

The following were candidates for membership:—Drs. Sydney S. Shirlow (Balmain), Charles H. S. Hozier (Lismore), Francis W. Kane (Nowra), Robert N. B. Stony (Nowra), Alfred Barcroft (Bowral), Francis L. Stuckey (Burwood), F. W. Langton (Redfern), Charles James Kearney (Grafton).

Read letter from Dr. Davis, of Canowindra, with reference to the membership of the Branch. Matter to be kept in view.

Read letter from Dr. Liddell, of West Maitland, with regard to a travelling organizer.

Read correspondence with regard to Dr. Milne's application for membership. Resolved that an application form be forwarded to Dr. Milne.

The Hon. SECRETARY reported that the Great Hall of the University had been secured for the Conversazione.

Read letters from the Victorian Branch. To be acknowledged.

Read the joint report of Drs. Rennie and Crago on matters of interest in Victoria and Tasmania to the Association and the *Australasian Medical Gazette*.

Received copies of regulations relating to Medical Practice and Registration in the States. Resolved that a letter be written to the General Secretary of the Home Association, explaining that "infamous conduct in a professional sense" had not the same significance in this State as in the United Kingdom.

Read letter from Mr. F. Kemp, Secretary of the United Friendly Societies' Association, asking for a

conference on the question of the Australian Natives' Association dispute; also Hon. Secretary's reply, declining conference, and giving reasons.

Received letter from Mr. Bruck, with reference to the Australian Natives' Association. Mr. Bruck to be thanked.

Read letter sent by the Hon. Secretary of the Branch to the Medical Officers of the Balmain Dispensary.

The Hon. SECRETARY reported that Dr. W. C. Watson had been appointed Medical Officer to the Australian Natives' Association at Auburn.

Read letter from Mr. C. Newman with reference to lodge contracts.

Read letter from Mr. S. N. Mears, stating that he had resigned his position as Chemist to the Australian Natives' Association.

Read letter from the Hon. Secretary of the Inebriates' Retreat, enclosing copy of formula in use. To be acknowledged.

Read letter from Dr. Moffitt, of Balranald, with reference to his appointment as Medical Officer to the local hospital. Resolved that the suggested advertisement be inserted.

Read letter from Dr. Müller, of Lismore, explaining lodge dispute, and asking that an advertisement be placed in the press. Request granted.

Read letter sent by the Hon. Secretary to Drs. Sprott, Hogg, and Savage, with reference to the Australian Natives' Association, and letter from Dr. Hogg in reply. Copy of letter to be sent to the medical men at Burnie, Tasmania.

The Hon. SECRETARY reported that he had interviewed the Medical Adviser to the Government on the question of medical fees to witnesses. Resolved that a notice be inserted in the *Australasian Medical Gazette*, requesting country members to furnish the Hon. Secretary with instances where a strict reading of the "Medical Witnesses Act" had pressed harshly on the profession.

Accounts were passed for payment.

The question of invitations for the conversazione was dealt with, and a list prepared.

Queensland.

A MEETING of the Branch was held on Friday, May 2nd, with the following attendance:—Dr. Hopkins (Vice-President, in the chair), Drs. Taylor, Sutton Robertson, Hawkes, Wield, Thomson, Espie Dods, Lilian Cooper, Eleanor Greenham, Turner, Hardie, Lockhart Gibson, Flynn, Cameron, Byrne, Carvoso and Brockway (Hon. Sec.).

A letter was read from the President, Dr. P. Bancroft, asking to be relieved of his office in consequence of a projected trip to England. It was resolved that Dr. Bancroft be asked to continue in office, and to act as a representative of the Branch in England.

Dr. BYRNE exhibited a uterus removed for fibroid, by Kelly's method.

Dr. BUTLER was elected a member of the Branch.

Dr. BYRNE read a paper upon "Puerperal Sepsis—its Pathology and Treatment." (See page 227.)

Dr. HAWKES said that infection occurred, not only by the lymphatics, but, as shown by *post-mortem* examination, through the veins, and that in such cases, opening of the cul-de-sac was useless. The treatment had to be adopted in trying circumstances. When the uterus had so softened that its outline could not be felt, curettage should not be done. When the temperature was not over 101.5°, and the pulse not more than 112, and the uterus could be distinctly felt, curettage should

be adopted. True disinfection was impossible, in consequence of the rottenness of the tissues; replacing of the plugs afterwards was not easy; and where phlebitis existed they were useless.

Dr. HARDIE said he had listened with very great pleasure to Dr. Byrne's paper, and wished there was more time to discuss fully the many interesting points he had touched upon. He considered puerperal sepsis was the same as any other form of septic poisoning, with the puerperal state superadded. In either case, the course of events depended largely on the nature of the septic infection; in some there being only some local inflammation, in others lymphangitis, in others abscess, and in others general septicæmia. If in labor, the patient is inoculated with the streptococci of erysipelas, she suffers from puerperal erysipelas; if infected by contact with scarlet fever, she suffers from puerperal scarlet fever; and if by the bacilli of tetanus, from puerperal tetanus; and so on. He thought we must still stand by the old doctrine of auto-infection and hetero-infection—the former probably originating from salpingitis, especially of the gonorrhœal origin, and the latter coming through the medium of the medical attendant or nurse. The decrease in mortality of late years being coincident with a period of greater asepsis on the part of the medical man, was evidence that infection from without played the most important part in the production of sepsis, but as long as patients suffered from suppurative salpingitis, he did not consider it possible to absolutely prevent sepsis in the puerperal state. He objected strongly to curettage as recommended by Dr. Byrne, for the simple reason that the medical man is working in the dark. If called upon to treat a case of puerperal sepsis, where there was a suspicion that some placental tissue or membrane was left behind, his treatment would be the same as after miscarriage. The patient being under chloroform, he would introduce his hand into the vagina, and with one or two fingers, explore the interior of the uterus. If anything required removal, the fingers would remove it, or if they could not he would use a blunt spoon, and finally re-examine to see that the uterus was clear. He considered the finger an ideal curette, because it informed us (1) whether there was any foreign substance present; (2) if any, where it was situated (an important point if curettage was required); (3) whether it had been completely removed; and (4) it never does any harm to the endometrium. He looked on curettage after labor and abortion for sepsis as bad practice. Should the cervix not admit the finger in abortion he would dilate if the patient required immediate attention. If in his practice a patient develops slight temperature within a few days after labor, he usually gives 10 grains of Dover's powder at bedtime. It causes free perspiration, increases the discharge, and gives a good night's rest, and in the morning if the cause is trivial, the temperature is usually normal.

Dr. HOPKINS did not regard the curette as so fatal an instrument as Dr. Hardie. He thought after abortion blunt curettage was desirable. He had not found any fatal results after using a blunt flushing curette. He regarded Pryor's operation as a useful one in selected cases, with a great future before it. He related three cases, one of which was fatal, and two recovered, which, judging from his experience, would otherwise have died.

Dr. BYRNE, in reply, did not wish it to be thought that he looked upon the operation as a cure-all, but that it was a distinct advance on the old policy of drift, and that it should be done early. In his experience, venous infection, as mentioned by Dr. Hawkes, was uncommon. Curettage at full term must

be regarded by all as attended with the danger of perforation of the uterine wall. The general condition and circumstances of the patient were a better guide to treatment than the temperature and pulse. His conception of a blunt curette was a piece of bent wire with no cutting edge whatever. If after a few days the temperature was above 100°, he would perform gentle curettage, and then if the temperature increased, he would curette and do Pryor's operation. Pryor's practice was in sepsis never to curette without opening the cul-de-sac. There was no need to remove the uterine plug for three or four days, and the cul-de-sac plug for four or five days; if the former were removed in 24 hours, much pain resulted from the dragging away of endometrium. It was impossible to introduce a finger through the os in a three month's miscarriage in a primipara, and he would object to dilatation sufficiently for the introduction of a finger. He failed to distinguish between a blunt spoon and a blunt curette.

Victoria.

THE ordinary monthly meeting of the Victorian Branch of the British Medical Association was held at 178 Collins Street, Melbourne, on Wednesday evening, 23rd April. The President (Dr. McCansh) occupied the chair.

Dr. BRYANT read some notes on a case of empyæma. A miner, aged 23, while working in West Australia, was suddenly seized with pain in the right side of the chest, and was compelled to give up work. Seven weeks later he was found to have some bronchitis and signs of fluid at the right base, and some difficulty in extending the right leg. He improved considerably under general treatment, but subsequently an abscess pointed over the right renal region. This was opened, and the abscess cavity was found to communicate through the diaphragm with the right pleural cavity. The patient made an uneventful recovery.

Dr. NEILD remembered an old friend of his who had an abscess in his liver, which communicated with the lung by perforating through the diaphragm, and emptied itself, in the form of bile-stained pus, by means of bronchus through the mouth.

Dr. BLACK had also seen the same sort of thing as Dr. Neild.

Dr. CUSCADEN had seen a case of tropical abscess of the liver in the West Indies, which had burst, and a large quantity of pus had been brought up, and pure bile had been discharged by this means for some weeks after.

Dr. MCCANSH remembered a case which was diagnosed by Dr. Wyllie, of Edinburgh, as a large abscess of the liver, and this had burst and discharged itself through the lung, and then through the mouth. The liver decreased in size, and bile was discharged for some time, and then the patient got all right. This man had never been out of Scotland.

Dr. BOAKE wished to know if there was still much discharge from the wound, and, if so, whether it might not be from pleural cavity.

Dr. BRYANT replied that the difficulty in diagnosis in the first place was due to the disappearance of the pus from the pleura, and the after symptoms simulated a psoas abscess. The discharge from the wound had decreased to such an extent that it was not advisable to think of any further interference for some time. If a discharge continued for any length of time it might be necessary to re-set portions of several ribs, in order to allow the side of thorax to fall in, and close up any cavity that might exist in that situation.

Dr. BRYANT also read some notes on a case of suppurative appendicitis. A man, *æt.* 40, was seized with violent abdominal pain on the 20th March, and sent for Dr. Ingham, of Werribee, who found he had a temperature and great pain over appendical region, and was vomiting. He prescribed for him, and on the 21st, on visiting him again, he found the pain still more localised, and temperature 101° F., and a distinct swelling over the region of appendix. The patient was brought to Williamstown. Dr. Bryant, assisted by Dr. Ingham, opened the abscess, and let out some foul-smelling pus, but could not find the appendix easily, so the cavity was drained with gauze, and the wound left open. There was the ordinary amount of serous oozing from the wound. The temperature became normal on the second day. The gauze in the wound was all removed about the fourth day, and the wound was practically healed about the 7th April. In this case there was a former history of colic attacks on two occasions, and lasting as long as three days, without medical aid being called in, so that this attack was probably not the first one.

Dr. CUSCADEN thought it was very wise not to do too much hunting for the vermiform appendix in such suppurating cases as this, and he considered free drainage was the first necessity, as in many cases life was seriously endangered by breaking down adhesions, and so allowing the escape of pus into the peritoneal cavity. Another point he would like to remark upon was the frequency with which saline solution was poured into the abscess cavity. He considered this a great source of danger, as it might wash infection into the peritoneal cavity.

Dr. BLACK remembered, not so many years back, when appendicitis was known as typhlitis or perityphlitis, how frightened practitioners were to interfere surgically with such cases, and he related a case to which he had called the late Dr. Beaney, and which he believed was about the first that Dr. Beaney had operated upon, and they were successful in saving the patient.

Dr. MCANSH agreed with Dr. Cuscaden in the danger of too much interference in suppurating appendicitis.

Dr. CUSCADEN read a paper on puerperal eclampsia, with details of some cases. (See page 235.)

Dr. BLACK wished to know what dose of morphia was used to start with, and had no bad effects been noticed from its use at any time in the Women's Hospital? He would also like to know if creosote or guaiacol were ever used to produce diaphoresis. Regarding the use of morphia in large doses, the late Dr. Jowl was very definite in his ideas, and would not tolerate a larger dose than $\frac{1}{4}$ th of a grain.

A general discussion then took place, in which the principle was affirmed that:—

- 1st. Attenuation of the toxin must be attempted by salines, intravenous or otherwise, and venesection in suitable cases.
- 2nd. Elimination by diaphoresis, diuresis, etc.
- 3rd. Controlling the nervous centres by chloroform inhalation, morphia (inject. hypod.), chloral, and pot. bromide per rectum, and any other nerve sedative.

Dr. CUSCADEN replied to Dr. Black that the dose of morphia he started with was generally $\frac{1}{4}$ grain, but that frequently as much as gr. vii. had been given with impunity at the Women's Hospital in such cases as these reported, and with great success. He had never used creosote to produce diaphoresis in eclampsia. In all the seven cases reported, the eclampsia had come on after delivery, and such cases were always considered more serious.

South Australia.

THE usual monthly meeting was held on Thursday evening, 24th April, 1902, at the University. Present: Drs. Todd (president), Symons, Brummitt, Wigg, R. A. Hamilton, Poulton, Plummer, Lendon, Douglas, Scott, C. Verco, Watson, J. C. Verco, W. Verco, Sweetapple, Harrold, Hornabrook, Brown, James, Gregerson, Evans, Morgan, Gault, Marten, W. Hayward, Reissmann, and Gunson (hon. sec.). Visitors, Drs. Weld, White, and Flecker.

Minutes of last meeting taken as read and signed.

Exhibits were shown by Drs. Marten, J. C. Verco, Johnson, and Gunson.

Professor WATSON shewed the following specimens:—

1. Right common carotid artery and internal jugular vein from a man *æt.* 44, seven weeks after ligation, low down, with No. 1 catgut (Arnold's). The catgut has disappeared, and an old thrombus occupies the artery as far down as its junction with the subclavian. The corresponding vein is destitute of clot. (Dr. Johnson).

2. Burrowing form of hydatid, affecting the third and fourth lumbar vertebrae from a paraplegic male, *æt.* 40. There is no mother cyst, smooth-walled excavations in the bone, and the extra and intra thecal spaces are all stuffed with vesicles up to the size of a large pea. I have three times seen similar cases operated on with unsatisfactory results. (Dr. J. C. Verco).

3. Pathological horns—

(a) in the ear of a fat wether in the site of an old ear-mark.

(b) on the snout of a mouse, causing the animal to resemble a minute rhinoceros. (Mr. Zeitz).

4. Pelvic floor of a multipara who suffered from prolapse of the uterus and pelvic varicocele. Paint injected into the left uterine artery found its way into the ovarian veins of the same size, thus proving the existence of aneurismal varix, and explaining a thrill sometimes noted in P.V. examinations under an anæsthetic. (Dr. Lynch).

5. Ovary hollowed out by a blood cavity which communicates in two places with the lumen of the corresponding left fallopian tube near its ostium. Leakage had been going on for several weeks from the ostium of the tube, and a pelvic hæmatocele had formed, as in ectopic pregnancy. I looked on the specimen as a probable ovarian pregnancy, but I failed to find any traces of chorionic villi in the blood cavity. Dr. Morton, of the Women's Hospital, Melbourne, removed it from a multipara *æt.* 28, with a history of previous pelvic trouble. (Dr. Morton).

6. Tubo-ovarian hæmatocele from a multipara *æt.* 20, who had suffered from pelvic peritonitis at 18 years of age. In this case leakage had occurred from a small accessory ostium in the right tube. The real ostium opened into the hæmatocele, just as it does in an ovarian hydrocele. The patient had several times fainted of late. One evening while dancing the hæmatocele gave way, and the patient collapsed. The abdomen was opened next day, and a quantity of recent and ancient clot and bloody fluid was washed out of the peritoneal cavity. The appendix was adherent to the tube, and was removed. (Dr. J. A. G. Hamilton).

7. Ovarian hæmatoma, the size of a lawn tennis ball, from a multipara, *æt.* 30. It was fortunately removed before rupture occurred. It was diagnosed as a parovarian cyst. (Dr. J. A. G. Hamilton).

8. Interstitial myoma, which, two months before removal, was twice the size, and soft, like a retroposed pregnant uterus. It was pushed up into the abdominal

cavity before the decrease began. From a married multipara, *at 36*. (Dr. J. A. G. Hamilton).

7. Spongy myoma, the size of an adult head, which occupied the upper abdomen. It is attached to the fundus uteri by a thin pedicle, and received its blood supply from the omentum extensively adherent to it. The uterus contains a five months' foetus which might have been carried to term under happier conditions. From a primipara, *at 34*; operated on in the country.

8. Pear-shaped uterus with very thick walls, and an eroded os, from a multipara *at 42*, who suffered from severe menorrhagia. The cervical canal was coned out till the vagina was reached, thus avoiding the para cervical blood vessels, and troublesome hæmorrhage as practised by Dr. Worrall, of Sydney. (Dr. J. A. G. Hamilton).

9. Large sarcoma of testicle of rapid growth. The epididymis is equally affected with the rest of the testicle. From a man, *at 42*. (Dr. L. Bickle).

10. Casing of a Boer bullet removed from the abdominal wall of Corporal Wells, brother of our student. The Corporal was hit in seven places, and owes his life to having been left undisturbed where he fell for a whole night. (Dr. Shepherd).

Elections.—Drs. R. Hornabrook, Charles Reissmann, and H. Newland, were elected to the Branch.

Nominations were received for the officers and members of the Provisional Executive Committee of the next Australasian Medical Congress, to be placed in the hands of the President elect (Professor Stirling, C.M.G., &c.).

Dr. POULTON read his paper. (To appear in next issue); and Dr. Cudmore's paper (see p. 256) followed.

Owing to the lateness of the hour the discussion on these was adjourned.

REPORTS OF SOCIETIES.

SYDNEY METROPOLITAN MEDICAL ASSOCIATION.

THE annual meeting of the Sydney Metropolitan Medical Association was held on Thursday, May 1st, at 8.30 p.m., at the Cambridge Club Hotel, Sydney.

The following were elected officers for the year:—President, Dr. C. P. B. Clubbe; Vice-presidents, Drs. MacCormick and Sinclair Gillies; Hon. Secretary, Dr. Maitland Gledden; Hon. Treasurer, Dr. Arthur Palmer; Committee, Drs. Hankins, West, Spencer, Maitland, and Taylor Young; Auditors, Drs. O'Hara and Levy.

After the business a smoke concert was held.

Compulsory Vaccination up to Date.—There is no lack of thoroughness in the methods adopted in America for promptly dealing with emergencies. This is graphically illustrated by a recent occurrence at Minneapolis, where the medical officers of the health department of that city unexpectedly raided the Chamber of Commerce and vaccinated every occupant of the building. There was great excitement when it was discovered that all must, *volens volens*, submit to the operation. Exit from the building was barred by policemen, and upwards of three hundred persons were there and then inoculated.

MALE ATTENDANT for mental, inebriate, or general cases, seeks engagement. References and testimonials show 13 years' experience, including five years as attendant at Callan Park Hospital for Insane, three years as wardman in charge of Singleton Hospital. Address: J. HILES, 161 Cecily Street, Leichhardt.

CORRESPONDENCE.

London.

(FROM OUR OWN CORRESPONDENT).

The Early Diagnosis of Enteric Fever—Death of Professor Julius Wolff—The Carnegie Trust—Recrudescence of Influenza—Re-Vaccination—The Surgical Treatment of Mitral Stenosis—The Anti-Mosquito Campaign—Tuberculosis Congress in America—Cancer Investigation.

AT a meeting of the Société Médicale des Hôpitaux de Paris, held on the 27th December last, M. Jules Courmont called attention to the great value, as a means towards an early diagnosis, of the discovery of Eberth's bacillus in the blood. It has been said by other observers to be present in from 70 per cent. to 80 per cent of cases, but Courmont believes it may always be found, except perhaps in very mild or abortive manifestations of the disease. It appears early, often as soon as the fifth day of the disease, and persists in the blood until at least the end of the third week. In two cases out of a series of nine related by Courmont, it was found on the fifth and ninth days respectively, while Widal's reaction was not obtained until the twenty-second and forty-fifth days. In all the nine cases he obtained the bacillus from pure cultivation in from 300 to 500 cubic centimetres of bouillon. These observations are of the very highest importance, and, should they be confirmed, will put us in possession of a much needed means for early diagnosis in obscure cases, especially at the stage when the valuable test introduced by Widal so often yields a negative result.

The University of Berlin has sustained a serious loss by the death, on the 8th February, from apoplexy, of Dr. Julius Wolff, Professor of Orthopædic Surgery. He was born in Prussia in 1836, and took his degree at Berlin in 1860. The early part of his career was passed in general practice, which he relinquished on his appointment in 1868 as *privat-docent*. In 1890 he was elected first Professor of Orthopædic Surgery in the Berlin University, and in 1892 his great work, on "The Transformation of Bones," was published under the auspices, and at the expense of, the German Royal Academy. He was a universal favourite, and his death will be regretted, no less by his professional brethren, than by a large section of the general public.

The results of the first year's working of the Carnegie Scottish University Trust have just been published, and show a gratifying amount of success. The number of applicants for assistance amounted to no less formidable a total than nearly 6,000, but only 3,600 proved to be serious claims, the remainder being prompted by curiosity, misapprehension, or a desire for information. The list of 3,600 was reduced by withdrawals, disabilities of insufficient education and other valid causes, to 2,241, of whom 872 hailed from Edinburgh, 828 from Glasgow, 473 from Aberdeen, and 268 from St. Andrews.

It is unfortunately abundantly evident that in various parts of Great Britain the population is again in the clutches of the influenza fiend which, for the time being, has ousted smallpox from its evil pre-eminence. The record of deaths in London directly attributable to its ravages rose from 26 for the week ending the 1st February to 107 for the week ending the 22nd February, while the number of deaths from diseases of the respiratory organs reached a total for the same week of 885, being 363 above the corrected average. The type of the malady is so far mild, but this fact constitutes no small danger because of the

neglect, and even contempt, of ordinary precautions which it engenders. If taken in time, the attack need not be feared any more than an ordinary feverish cold, but the poison, even in trivial cases, reduces vitality in the most surprising way, and predisposes the patient, during convalescence, to the danger of all forms of inflammatory disturbance. Clear days and brilliant sunshine tempt him out of doors while he is still in a debilitated state, and even betray him into discarding warm wraps, with the result that a chill wind strikes him, and often brings about a relapse, which may be but the forerunner of fatal complications. The House of Commons appears to provide a peculiarly suitable centre of infection, and on this, as on several previous occasions, a large number of our legislators are confined to their bedrooms, so that already the sick list of distinguished men is uncomfortably long. In many of the metropolitan hospitals, a large proportion of the nursing staffs have been attacked, with consequent serious dislocation of the daily routine of work. It is exceedingly doubtful whether there is any reliable safeguard against Pfeiffer's bacillus, and it is fortunate that the delusion as to the prophylactic value of ammoniated quinine, eucalyptus, and innumerable other vaunted specifics is now pretty well exploded.

The following statement, copied from one of the daily papers, is an eloquent testimony to the renewed experience which is being acquired during the present epidemic of smallpox, of the protective value of re-vaccination:—"Before the smallpox broke out in the Mile-end (Stepney) Infirmary, 85 out of the 48 nurses in the establishment were re-vaccinated; of the eight who were not re-vaccinated, seven have already contracted smallpox, while not one of the 85 who were re-vaccinated has caught the disease."

A preliminary note, communicated to the *Lancet* of February 8th by Sir Thomas Lauder Brunton, conveys the startling suggestion that mitral stenosis may become amenable to surgical treatment by the heroic method of division of the contracted valve through the ventricle. Such a suggestion, coming from such an authority, carries with it a grave responsibility, and since the experiments on which it is founded have been made only on the valves of dead animals, it might possibly have been more in the interests of scientific advancement had any communication to the press been withheld until there were more definite grounds for warranting recourse to a procedure which, even in the most skilful hands, must always be beset with the greatest danger. Sir Thomas Lauder Brunton endeavours to meet this objection by the plea that time will not permit him to carry on a sufficient number of experiments alone to prove the value or desirability of such a method of treatment; that meanwhile many patients are suffering and dying from mitral stenosis, and that, therefore, he is anxious to enlist others in the field of enquiry which he has but entered, and no more. But surely in such a hazardous undertaking as is here involved, something more tangible than mere dead-house experiments should have been accomplished before the profession was invited to elaborate his ideals. It is true that good results have been obtained by the surgical management of wounds in the heart walls, but the urgency of such accidents warrants interference which even the boldest surgeon may well shrink from in conditions which involve the central structures of a heart disturbed by disease, but intact so far as concerns its walls. And though in one sense intact, it may be doubted whether in most cases of long standing, the tissue of the heart walls has not undergone a sufficient degree of fibrotic degeneration to make the consequences of incision into them incomparable with those that

follow surgical methods as applied to a healthy and vigorous ventricle or auricle. Added to this there is the further grave doubt as to whether such a division—even if successfully accomplished in a heart free from serious degenerative change—would produce the result hoped for, because it is not inconceivable that in the process of healing, the wound produced by the surgeon's knife might leave a greater degree of contraction than previously existed; and even in the absence of this untoward result, might possibly lead to a permanent regurgitation. Should surgery ever become capable of dealing with this grave affection in the way Sir Thomas Lauder Brunton suggests, the gain to human suffering will be great indeed, but there are many *a priori* arguments against such a hope, and the whole question is still too hypothetical to deserve more than a back place in the professional mind as one of the desirable possibilities of surgical progress.

Major Ronald Ross and Mr. Walter Myers, of the Liverpool School of Tropical Medicine, are about to proceed for the third time to Sierra Leone to rejoin Dr. Logan Taylor's expedition sent out by the School early last year. A large area of the breeding-ground of mosquitoes has already been destroyed, with the result that the houses have been greatly freed from the presence of anopheletes. Too short a time has elapsed to speak definitely of the results achieved, but Dr. Latchmore, the medical officer of the Princess Christian Hospital in Sierra Leone, reports that there have recently been remarkably few cases of malaria, and that the health of the European population has manifestly improved. These expeditions are doing excellent work in West Africa, and the Liverpool School of Tropical Medicine is to be congratulated on the enterprise which has prompted it to tackle so energetically and practically this important question of malarial prophylaxis.

On the 14th, 15th, and 16th of May next, the third annual meeting of the American Congress of Tuberculosis will be held in New York. The four following special subjects have been chosen for discussion:—

- (1) Preventive legislation, embracing the social, municipal, and State aspects of tuberculosis.
- (2) Tuberculosis in its pathological and bacteriological aspects.
- (3) The medical and surgical aspects of tuberculosis.
- (4) The veterinary aspects of tuberculosis.

Scientific men from every part of America have been invited to take part in the work of the Congress.

The ensuing official statement has been furnished to the medical press by Mr. Frederick G. Hallett, Secretary to the Conjoint Board of the Royal College of Physicians and the Royal College of Surgeons, of London:—"The following resolution of a Special Committee was unanimously adopted by the Council of the Royal College of Surgeons on February 13th, and by the Royal College of Physicians on February 18th, namely:—"This Committee recommends the two Royal Colleges to consider and develop a scheme for investigation into the causes, prevention, and treatment of cancer, and that for this purpose delegates be appointed by the two Royal Colleges (who shall have power to add to their number), to draw up a detailed scheme.' In pursuance of this resolution, the following delegates were appointed to draw up a detailed scheme for systematic investigation into the causes, prevention, and treatment of cancer, namely:—As representing the Royal College of Physicians—The President, Sir William Church, Bart., M.D.; Sir William Broadbent, Bart., M.D.; Dr. Payne; Dr. Pye-Smith; Dr. Rose Bradford; Dr. Whipple; Dr. J. F. W. Tatham. As

representing the Royal College of Surgeons—Mr. R. G. Howse, President; Mr. J. Langton; Mr. Watson-Chayne, C.B.; Mr. H. Morris; Mr. R. J. Godlee; Mr. H. T. Butlin." According to the *St. James Gazette* of February 19th, Sir William Broadbent has been commanded to communicate to the Royal College of Physicians the following gracious message on the subject:—"The King takes great interest in the prevention and treatment of cancer, and is glad that the Royal Colleges of Physicians and Surgeons are taking up the question of cancer research, and hopes for important results from their action."

THE TREATMENT OF MIDDLE EAR SUPPURATION.

(To the Editor of the Australasian Medical Gazette.)

SIR,—Just a few words on Dr. Brady's fair and courteous criticism of my paper. And, firstly, with regard to my misquotation of Professor Macewen; this is a good instance of the danger of getting your facts second-hand. I picked up the phrase about the drop of pus *versus* the charge of dynamite out of a report in a magazine of a discussion on middle ear suppuration. The phrase sounded epigrammatic, and, as it suited my purpose, I "went and took it"—to my undoing.

As to the vexed question of operating, or not operating in simple chronic otorrhoea, I think it is possible I did not make my meaning clear.

My position is this: Take a case of chronic middle-ear discharge without mastoid or other symptoms. Everyone agrees that the ordinary methods of treatment through the meatus are at first indicated, and should be faithfully tried before any other treatment is proposed. But I hold that one can never affirm that among the poorer patients such treatment is properly carried out. And so I suggest that if the home treatment fails, the cases should be taken into the hospital, not for operation, but for efficient treatment by the ordinary methods. If this did not succeed, the clearing out of the mastoid would then be expedient, as the patient cannot be trusted to keep the ear clean. But suppose the patient be well-to-do, and the treatment regular and careful, including, it may be, currying, and yet the ear does not heal. How shall we answer the question, "What risk do I run by refusing operation and continuing simply to keep the ear clean?"

I think we must admit that in such a case the risk is very slight indeed, possibly not greater than an operation, "which," to quote Politzer's words, "though not necessarily dangerous in the hands of a skilled operator, is nevertheless a serious one when we consider—(1) the many important structures in the vicinity which may be injured; (2) the possible permanent impairment of hearing in those who before the operation could hear fairly well; (3) the protracted healing process after the operation."

In conclusion, I may say that I welcome the assurance of a hopeful prognosis in chronic otitis which Dr. Brady holds forth. Dr. Brady's great experience enables him to speak with an authority to which I can lay no claim, and encourages me to renew my efforts in dealing with these cases.

I am, Sir, yours &c.,

RICHARD ARTHUR.

THE NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION AND FRIENDLY SOCIETIES.

(To the Editor of the Australasian Medical Gazette.)

SIR,—It seems to me that the weak point in the position of the Branch is the implied admission that the ordinary Friendly Societies' rate of remuneration can be made to pay.

I am of opinion, decidedly, that if the work be done, even by men with sufficient courage to resist abuse of the system, but with reasonable care and attention, that it does not pay, and that no medical man can make a living and prepare for the inevitable break down from over-work, on club pay. This, unfortunately, does not appear to be the general opinion among medical men, and therefore is not likely to be the opinion among members of the societies.

In my opinion, the whole question hinges on this point. If it pays to do club work at present rates, I, for one, object to the protective system, which would boycott those who are willing to do it. If it does not pay, time will work a remedy. I believe in every man having full liberty to set what value he likes on his own services, provided he has not a monopoly, and the fact of circumstances compelling one man to work for less than another, does not appear to me to be a sufficient reason for refusing to have anything to do with the one and not the other. At the same time, I reserve to myself as my undoubted right, the refusal to meet any medical man in consultation if I choose, upon what I regard personally as sufficient cause, in all ordinary cases.

I have the utmost sympathy with the aims of the Branch, but I have misgivings as to its tactics. I cannot understand any medical man having anything to do with a society like the Australian Natives' Association, except under the compulsion of dire distress, especially after the insulting actions and statements of its officers, but I should like that result to be attained by the individual self respect of the members of the profession and not by coercion. I believe that self respect on the part of the members generally and a modicum of courage will do more than any amount of collective action to remedy the abuses which I, with most members of the profession, admit are flagrant. I believed this to be the case before I had anything practical to do with Friendly Societies, and I believe it still after ten years' experience of them.

I ask you to publish this letter, as I have had no opportunity for several years of attending meetings of the Branch, and having expressed an opinion before, I feel compelled, although with reluctance, to do so again.

I am, yours etc.,

W. HULL.

Cootamundra, April 9th, 1902.

[We willingly publish Dr. Hull's letter, but would point out that "individual self-respect" alone has not proved in the past sufficient to keep men from acting unprofessionally.—ED. A.M.G.]

X RAY and Geissler tubes re-exhausted.

A. C. MOLE.

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REVIEW OF CURRENT MEDICAL LITERATURE.

MEDICINE.

Hypostatic Albuminuria of Splenic Origin.

Rolleston (*Lancet*, March 1st, 1902) draws attention to the fact that in some patients with considerable splenic enlargement, rest in bed or in the recumbent position, may be accompanied by albuminuria, and that the albumin may disappear from the urine when the patient assumes the erect posture. Falkenheim (*Deut. Archiv. für klin. Med.*, Band 35, S. 446, 1884) described this condition in a man aged 50 years, with hepatic cirrhosis and a large spleen. He observed that lying on the right side and on the abdomen did not induce the albuminuria; and suggested that in the recumbent position the spleen pressed on the left renal vein, interfered with the return of venous blood from the kidney, and thus gave rise to albuminuria. Rolleston adopts this explanation as probably correct, and reports two cases of hepatic cirrhosis and splenic anaemia respectively, with considerable splenic enlargement, which presented a rather large quantity of albumin in the urine while lying in bed, but which disappeared after they had been up for several hours. The albuminous urine was often high coloured, and, like the urine of backward pressure in cardiac disease, lithatic. The night urine was sometimes found to become free from albumin. While, however, the albuminuria is probably due to the mechanical pressure of the spleen on the left renal vein in the recumbent posture, the occurrence of the albuminuria is far from being constant in cases of splenic enlargement. It does not depend on the size of the spleen, and it is possible that its occurrence or absence may depend on some difference in the condition of the suspensory peritoneal ligaments of the spleen, which thus determine or prevent direct pressure on the left renal vein. It is also possible that the appearance of the albumin is dependent on an underlying want of vitality or nutrition in the kidney, which, though not sufficiently marked to induce albuminuria under ordinary conditions, does so when chronic venous engorgement is superadded. In support of this view is the fact that in one case the albumin disappeared from the night urine after the patient had improved under treatment in the hospital, and that subsequently, after an attack of influenza, the albumin re-appeared in the night urine.

Splenic Anaemia with Ascites (Banti's Disease).

Senator (*Berlin. klin. Wochenschr.*, Nov. 18th, 1901) states that in reality this disease is made up of a number of pathological conditions, which have been understood for a long time. Banti showed the relation which the various processes bear to each other, and pointed out that when so related they constitute the continuous steps in a single pathological process. Banti divides the disease into three stages—an anæmic, a transitional, and an ascitic. The first stage has been variously described under the names pseudo-leukæmia and anæmic splenica. The second and third stages have been considered as cirrhosis of the liver, with anæmia splenica or the hæmorrhagic diathesis. The enlargement of the spleen is fibro-adenoid in character; there are no nucleated red blood cells, and the lymphatic glands are not enlarged. Banti considered the ascites as always due to cirrhosis of the liver, but Senator shews that this condition of the liver is not by any means a constant one; the ascites may

arise from the mechanical causes due to the presence of an enlarged spleen in the abdominal cavity. The blood changes consist in poikilocytosis, an increase in the alkalinity of the blood, and a diminution in the number of the red cells, leucocytes and the amount of hæmoglobin. The tendency to spontaneous hæmorrhage is marked. The disease has usually been considered as of infectious origin, but no specific micro-organism has been isolated. It has been also supposed to be due to intestinal auto-intoxication. The diagnosis is made on the chronic enlargement of the spleen and the blood condition, together with the fact that these conditions precede the liver changes. Malaria may be excluded by the blood examination, but it must be remembered that in some cases this disease has followed upon malaria. The prognosis is uncertain. The treatment consists in proper dietetic and hygienic measures, and the internal administration of arsenic, iodine and iron. Splenectomy has been performed with success in some cases.

Purpura Hæmorrhagica in Pulmonary Tuberculosis.

Roemisch (*München. Medicin. Wochenschr.*, January 14th, 1902), in recording a case of this nature, expresses the opinion that this complication is due to the re-absorption of the toxins of the tubercle bacillus. The patient was 25 years of age, and presented the usual history and physical signs and symptoms of pulmonary tuberculosis. The hæmorrhagic spots appeared first on the forearms and dorsal surface of the hands, but later also on the upper arms and shoulders. Slight hæmoptysis occurred. The purpura remained for about four months with varying intensity, and at the end of that time the spots had all disappeared, and no recurrence took place a year afterwards.

Milk v. Whey in Enteric Fever.

The most appropriate diet in enteric fever continues to be a subject of much difference of opinion, but the general tendency of modern treatment is to abandon the use of pure milk, that is milk unprepared in any way, as an article of diet in this disease. Pridham (*Lancet*, March 15th, 1902) reports that Dr. Gee, of St. Bartholomew's Hospital, London, had treated five cases with whey instead of milk during the last three months. All the cases did well, but one case of extreme severity, which was attended with extreme prostration and had copious hæmorrhages, did remarkably well on this diet. The most noticeable points in this case were as follows:—1. Distension of the abdomen was entirely absent. Another patient with enteric fever, who was taking half a pint of milk with his whey, showed more distension on the third day after admission than this patient did at any time throughout his illness. From the size and thickness of the sloughs, the author believed that if the intestines had been distended with gas, perforation would inevitably have ensued. 2. There was an absence of delirium almost throughout the illness, except for a short time on one or two occasions. 3. There was an absence of severe diarrhoea in spite of the severe ulceration; the bowels were loose, but never became troublesome. It is probable that these three symptoms are often much aggravated by, or due to, toxins formed by decomposing milk curd. The cases are too few upon which to base sound conclusions, but, at any rate, the use of whey instead of milk is worth a trial.

Mastitis in Typhoid Fever.

McCrae (*Johns Hopkins Hospital Bulletin*, No. 130) discusses this question, and records three cases from the

wards of the Johns Hopkins Hospital. Mastitis is one of the rare complications of enteric fever, and occurs much less frequently than orchitis, thyroiditis, or parotitis. The cases here recorded were the first in over 1000 cases of typhoid fever at this hospital. The occurrence of suppuration in the course of the fever has long been recognised, but abscess formation in the breast has not been noted in most of the articles bearing upon the subject. The first case was that of a woman, aged 27, admitted to hospital on the 14th day of illness. The Widal reaction was obtained the day after admission, and the leucocytes numbered 4,000. The breast trouble appeared on the 29th day, and three days later the leucocytes numbered 8,000. The breast was opened on the 35th day, and the wound healed up rapidly. The mastitis appeared to have had no effect on the course of the disease, and the absence of a marked leucocytosis is noteworthy. The second case was interesting, from the fact that it occurred in a married woman of 25 years of age, with a moderate attack of the fever, and mastitis appeared in the right breast on the 13th day; in the left breast on the 18th day. The patient had a relapse of the disease, and mastitis occurred a second time in the left breast on the 52nd day. She recovered, however, completely, without suppuration occurring. The number of leucocytes increased from 8,000 to 10,000 in the first attack, and to 18,000 in the second attack. In the third case, the mastitis occurred during convalescence from a moderate attack of fever; suppuration occurred, and after the abscess was opened rapid convalescence ensued; the leucocytes did not number more than 8,000. References to other cases reported are made in the course of the article, and the conclusion would seem to be that mastitis is a rare complication of this fever; that it occurs in both sexes, and is apparently not associated with a functioning gland; that both breasts are involved in about half the cases; that suppuration occurs in about half the cases, and may be associated with the typhoid bacillus or staphylococcus; that it is of no special moment in the prognosis.

Acute Syphilitic Nephritis.

Hoffman (*Berlin. klinische Wochenschrift*, March 3rd 1902) reports a case of acute syphilitic nephritis, the existence of which has been denied by several authors. The patient presented an eruption of macules and papules, having received the infection only two months previously. There was a generalised enlargement of the lymphatic glands, and mucous patches in the mouth. There was no history of any previous or inherited kidney disease. Two weeks previously to being seen by Hoffman, he had noticed a marked reduction in the quantity of his urine; it had become dark red in colour, and became solid on boiling. The specific gravity was high, and on microscopical examination there were found a large number of hyaline casts, also a small number of leucocytes and red blood cells, and a few renal epithelial cells. A quantitative estimation of the albumin showed from 7 to 8 per cent. Under anti-syphilitic remedies the cutaneous eruption disappeared, and the urine improved. A recrudescence of symptoms occurred in two months, but the albumin again rapidly disappeared under the same treatment. The author considers this an undoubted case of syphilitic nephritis. Many authors have regarded syphilitic nephritis as of the hæmorrhagic type, but Hoffman thinks that the microscopical examination proves that the nephritis is produced by the action of the specific poisons on the blood vessels of the kidney, especially those of the glomeruli.

Obliterative Pericarditis with Hepatic Enlargement and Ascites.

In the *Berliner Zeitschrift für klinische Medizin*, vol. 29, page 385, Pick, of Prague, described a hitherto unknown clinical entity under the term "pseudo liver cirrhosis, the result of obliterative pericarditis," the chief symptom of which was marked ascites without general anasarca. Pick reported three cases with autopsies, and concluded that these cases showed that there existed a mixed form of cirrhosis of the liver accompanied by enlargement of the same and ascites without jaundice, which is occasioned by a latent pericarditis, creating a passive congestion of the liver, with consequent connective tissue proliferation. This latter so interferes with the portal circulation that a high degree of ascites follows. From the study of these three cases Pick drew the following conclusions in regard to the differential diagnosis:—1. An absence in the clinical history of the case of the etiological factor in the production of primary liver cirrhosis. 2. A history of a previous attack of pericarditis, accompanied by a slight oedema of the ankles. 3. In every instance a painstaking and careful examination of the heart should be made. When evidences of adherent pericardium are present together with enlarged liver and ascites, which is unaccompanied by general oedema or enlarged spleen, the diagnosis of pseudo liver cirrhosis due to obliterative pericarditis should be made. Other observers have reported cases confirming the views of Pick. Becker (*Philadelphia Medical Journal*, March 15th, 1902) reports a case of the same nature. A boy, aged seven years, with no family history of rheumatism, but a history of chorea at five years of age, developed a pericarditis in January, 1900. He was treated in hospital until the following March, when he was discharged in fairly good health. In August of the same year some abdominal swelling appeared, and he was found to have ascites. He was tapped, and then the liver was found to be enlarged, hard, tender, and pulsating. He was tapped again on two or three occasions, but gradually got worse and died in December following. *Post-mortem*: both layers of the pericardium were completely adherent to one another. There was also well-marked peri-hepatitis. Microscopically, the liver showed well-marked passive congestion, and the spleen the appearances of chronic splenitis.

PEDIATRICS.

Chorea, with Embolism of the Central Artery of the Retina.

Thomas (*Bulletin of the Johns Hopkins Hospital*, Oct., 1901) reports the case of a girl of sixteen years of age, who presented slight choreic movements of the right arm, leg and face. Her speech was also slightly affected. The heart was dilated, and a harsh, blowing murmur was audible at the apex. The patient stated that blindness had come on suddenly in the right eye at the time the movements first began, and the defect in sight had not varied at all. On ophthalmoscopic examination, embolism of the central artery of the retina on the right side was detected. The author remarks on the comparative rarity of eye complication in chorea.

A Case of Hydrencephalocoele.

Wheeler (*New York Medical Journal*, February, 1902) reports the case of a child which was perfectly normal except for a large tumour protruding from the posterior

fontanelle. It was 12 inches in circumference, and covered with skin which was hairy near its attachment to the head. The tumour was translucent and fluctuating. Fluctuation, however, was not communicated to the anterior fontanelle. The child gradually sank, while the tumour increased in size, and became more tense. No convulsions were excited, nor any evidence of digestive disturbance, when the tumour was compressed. On the twenty-fifth day after admission to hospital sudden collapse occurred, and the child died with dyspnoea and cyanosis. On *post-mortem* examination the anterior fontanelle was found open, the cranial bones soft, with numerous islands of membranous bone formation, mingled with areas where there was no calcification. The sinuses and brain tissue appeared normal. From the posterior fontanelle there was a large fluctuating cystic growth, but fluctuation was not communicated to the anterior fontanelle. The cyst was 17 inches in circumference, translucent, and contained clear serum. Pressure forced the cyst contents into the posterior cornu of the left lateral ventricle.

The Effect of Heat upon Cow's Milk as an Infant's Food.

At the meeting of the New York Academy of Medicine, Dessau (*Medical Record*, January, 1902) read a paper on this subject. He dealt with the chemical action of heat on cow's milk. Cow's milk, as an infant food, should be regarded as a raw article of diet, and while cow's milk contained the same elements of nutrition as human milk, their relative proportions were such as to make the two kinds of milk very different articles for infant feeding. The indigestibility of the curd of cow's milk had been recognised from the first as a great obstacle to the use of such milk for infants; but the curd of sterilised cow's milk, as seen in the vomit, resembled that of human milk. The high degree of heat used in the original method of sterilising milk caused many chemical changes in the milk, amongst others the decomposition of the fats. The author had noted that when the temperature of the top-milk was gradually raised by means of a steam cooker to 140° or 160° Fahr. for ten minutes, the curd was much softer than usual, and that this was still more marked when the milk was mixed with equal parts of water, or in the proportion of one to three. The taste of such milk was not unpalatable, as was the case with boiled milk. It was important that the temperature should not be raised to the boiling point, and this could be done in practice quite easily by heating the milk in a steam cooker for a period of ten minutes after the water in the outer vessel had begun to boil. This method of preparing milk had the advantage of giving a very digestible article, and at the same time removing most of the noxious germs. By the dilution mentioned, the proportion of fats was decreased, but this was counter-balanced by the increased digestibility. There was no fear of children fed on milk thus prepared developing scurvy.

An Ephemeral Attack of Hæmorrhagic Purpura.

Richardson (*Medical Record*, December, 1901) records the case of a delicate girl of eleven years of age, who was suddenly seized with vomiting of blood, tenderness of the abdomen, pain in the fingers and wrists, general malaise, and a temperature of 102° Fahr. During the night she had three or four stools consisting mainly of blood. On the following morning the pain in the wrists had increased, and there was also pain in the ankle joints. The legs now presented numerous purpuric spots, and the prostration was quite severe. During the day no further gastric or intestinal hæmorrhage

occurred, the temperature subsided, and the pain in the joints disappeared. On the next morning only the pigmented spots remained. There was no history of any previous attacks.

Dilatation of the Heart in Children.

Eustace Smith (*Practitioner*, January, 1902) states that cardiac dilatation in children is far from rare, and, indeed, in childhood, the heart may be said to dilate with exceptional ease, and quite apart from valvular mischief. It is due to blood pressure in a flabby, ill-nourished or degenerated heart, without there being any obstruction to the circulation. In anæmic boys, who over-tax their strength at violent games, and in children of both sexes who are growing rapidly, this condition is not seldom met with. It also occurs in nephritis, broncho-pneumonia, and in infectious fevers and allied septic states. It is specially in diphtheria that rapid and severe cardiac dilatation may give rise to serious apprehensions. It is also common in rheumatism and influenza. Dr. D. B. Lees has called attention to the constancy with which this condition is met with in acute rheumatism. The physical signs presented resemble very closely those of pericardial effusion, and probably are often mistaken for them. But the shape of the cardiac dullness is characteristic; it reaches upwards far above the third rib, and its right border is continued downwards and outwards to the right fifth interspace, to join the liver dullness, instead of curving inward to the infra-sternal notch. In the rheumatic cases, also, the dilatation is almost invariably accompanied by endocardial murmurs. When dilatation is moderate in amount, such as occurs in anæmic children, it is probably of little importance. The symptoms presented are slight, and the heart rapidly returns to its normal condition as the patient's nutrition is improved. When, however, dilatation of the heart occurs in the course of acute illness, we often find signs and symptoms of serious import. In these cases, accentuation of the second sound at the aortic orifice, as well as at the pulmonary, occurs, and is regarded by Lees as of unfavourable prognostic import. The danger of the case lies in the degree to which cardiac muscle degeneration has occurred. Poynton's researches, which show that the cardiac muscle degenerates more extensively in influenza and diphtheria than in rheumatism, are important as showing the danger of this complication in the two former diseases. In these diseases, then, the area of cardiac dullness should be carefully watched. In all cases of acute dilatation the patient must be kept at rest in the recumbent position, and the diet of the patient regulated so as to avoid such articles of food which cause flatulence, such as starchy foods. The patient should be fed on milk, custards, yolk of egg, stale bread or rusks, strong soups, etc., until such time as he can take boiled fish, chicken, and other kinds of solid food. If this condition complicates rheumatism, the treatment of that disease should be continued. But strychnia and iron are the most valuable drugs for this cardiac condition, and alcohol may also be needed.

PATHOLOGY.

The Defensive Power of Lymphatic Glands.

Professor Tommaso De Amicis (*Giorn. Internaz. delle Scien. Med.*) discusses the phagocytic defensive power of the lymphatic glands against the syphilitic virus and the semiological value which belongs to the different adenopathies in syphilis. While we are ignorant of the real nature of the specific agent in syphilis, we are justified in concluding that it is a microbic parasitic

element. It is well known that after the inoculation of the virulent principle in a point of the organism, there arises at that point a lesion which represents the initial poisonous focus. From this point the virus passing through the lymphatics penetrates the nearer glands, stops there and forms with the adenopathy, which accompanies it, its first station. It multiplies there and penetrates farther into the glandular system until it enters the circulation. Here the infective products gradually accumulate so as to form the constitutional infection. The blood, now filled with the infective elements, flows into other glands, which in their turn, retain the virus, multiply it, and in part preserve it and in part pour it into the circulation, and thus we have the further localisations in the different organs and tissues of the body. It is therefore claimed that the lymphatic glandular system in syphilis forms the best soil for the development and preservation of the poisonous elements. Hence the cellular hyperplasia of the glands has been considered in the greater number of cases as the measure of the intensity of the infection of the organism. This is the opinion which has hitherto been held as to the participation of the lymphatic system in the syphilitic infection, and it is well to examine if the phagocytic theory compels us to change our opinion.

The lymphatic system must be considered as a barrier to the admission of foreign substances which try to invade the organism from without, and the glands can therefore be considered as stopping places for the invading elements. This has been investigated for inorganic substances, such as cinnabar, coal dust, etc. The same has been taken for granted with respect to pathogenic organisms, and some investigators have thought that the lymphatic glands, having a maximum phagocytic power, were intended also for the destruction of the microbes contained in them. Augagneur, Landouzy, and Labbé hold this opinion, and consequently believe that the size of the glands would indicate rather the degree of resistance of the subject than the gravity of the disease. The absence of lymphatic swelling in syphilis would therefore be of evil import, because it would indicate that the protective action of the lymphatic organs is insufficient. Clinical experience, however, does not coincide with the conclusions drawn from the phagocytic theory applied to the glandular system; for notable enlargement of the glands frequently accompanies a severe attack of syphilis, and *vice versa*. Moreover, the phagocytic power of the lymphatic glands is far from being proven, and Professor Manfredi's experiments on this point prove clearly that the gland can for a longer or shorter time retain within its parenchyma a pathogenic organism, without any loss of vitality of the latter, while in the blood and connective tissue the microbes are more or less rapidly destroyed by the leucocytes and the germicidal action of the blood serum. Every gland, therefore, can be regarded as an accumulator of pathogenic organisms, inasmuch as the leucocytes in the glands have no phagocytic power. The peculiar power of the lymphatic glandular system of separating and entertaining not only inert substances, but micro-organisms, and the absence or extreme deficiency in that system of those bactericidal influences which everywhere concur in maintaining the asepsis of the living and normal tissues, explain how in an infective process, the special pathogenic agent may remain for a long time in the latent state an inhabitant of the glandular system, forming thus a *latent microbism*.

The lymphatic glands, therefore, in the struggle which the organism wages against the bacteria, while on the one hand, by blocking the way to the micro-

organisms, they act as organs of defence, yet on the other hand, by keeping them alive, act as dangerous depositories of infective material in the animal body. It is not difficult to understand the long pauses which are observed in the course of syphilis, given the possibility of a *latent microbism* which may exist in the glands not accessible to direct observation, in which the infective germs may be preserved for a shorter or longer period, always retaining their vital activity, which it would not be possible for them to preserve in the other tissues, owing to the bactericidal means with which the normal organism is endowed.

Modern researches, therefore, do not destroy, but rather confirm, the semiological value which had been given to the lymphatic glandular system in the syphilitic infection, in which the swelling, whether in a group of glands or in a single gland, may represent a *residual infective focus*, the seat of a *latent microbism*.

In conclusion the author lays stress on the importance of epitrochlear adenopathy as a probable indication of a rather severe degree of infection, and as a means of assistance in the discovery of a hidden or forgotten syphilis. Swelling of the epitrochlear gland lasts in some cases twenty-five or thirty years after primary infection, long after swelling has disappeared in the other glandular regions.

Infarction of the Right Adrenal.

Woolley (*Journal of Medical Research*, March, 1902) records a case of this nature, which would appear to be almost unique, as no mention of such a condition is made in the literature referred to by Rolleston in his lectures on the suprarenal bodies. The specimen was obtained from the body of a female child, aged eleven months, who died from some throat trouble, possibly diphtheria. On opening the abdominal cavity a mass of the size of a goose egg, and resembling a hæmatoma, was found in the right renal region. It was found that the right adrenal was embedded in this mass; it was enlarged and firm, but very dark, almost black in appearance, as from hæmorrhage. On section the lines of the cortex and medulla could be seen with difficulty, and the entire substance of the gland was of practically the same consistency and dark colour. In the medullary portion, and corresponding to the site of the central vein, was a large round whitish mass, in size about that of an ordinary match, which had all the appearances of a thrombus. This could be followed throughout the length of the organ. The left adrenal showed some hæmorrhagic spots both in the medulla and cortex, but otherwise was healthy. On microscopical examination of the right adrenal, the proper tissue of the gland seemed to have been completely replaced by hæmorrhage, except for the presence of occasional columns of palely staining nuclei surrounded by granular protoplasm, the sole remaining evidence of gland substance. The thrombus was a laminated fibrinous one, with very few leucocytes, and with very little evidence of cellular structure, and no bacteria were found in it. The origin of the thrombus could not be made out; it was probably marantic in origin judging from its structure.

It is reported that Mr. J. K. Caird, a merchant, will give to Dundee a Cancer Hospital, which will cost £18,000, and a laboratory to be endowed with £1,000 a year for five years.

The Friendly Societies and the Australian Natives' Association.

At a recent meeting of the United Friendly Societies' Association, in Sydney, a resolution was carried that a request should be made to the Council of the New South Wales Branch of the British Medical Association to meet in conference on the difficulty between the British Medical Association and the Australian Natives' Association. In reply to this request Dr. Hankins, the secretary of the Branch, sent the following letter:—

"I am in receipt of your letter of 21st instant, inviting representatives of the British Medical Association to meet your association in conference *re* the dispute, or difficulty, being experienced by the Australian Natives' Association and the medical officers. I am instructed to reply that members of this Branch of the British Medical Association will always be pleased to meet in conference members of the Friendly Societies' Association whenever the business concerns the relations of the medical profession with what they consider the legitimate friendly societies. As you are aware, we decline to regard the Australian Natives' Association as belonging to this class of society, and since the members of this Branch have, after due deliberation, come to the conclusion that they will not accept appointments for contract medical attendance under the Australian Natives' Association on any terms whatever, a conference would be clearly useless, and must be respectfully declined."

A special meeting of the United Friendly Societies' Association was called to consider this reply, and a lively discussion ensued.

Mr. Pennington (National Independent Order of Oddfellows) moved—"That the Australian Natives' Association be asked to retire from the Friendly Societies' Association, as their aims and objects are detrimental to this association." He was of opinion that the Australian Natives' Association should not have been allowed to affiliate with the association. From the published reports of the recent Australian Natives' Association conference, it was clearly seen that it was a political organisation.

Mr. E. Stedman (Protestant Alliance) seconded the motion. They should not, he contended, fight the battles for the Australian Natives' Association.

Mr. W. C. Bein (National Independent Order of Oddfellows) also supported the motion. He considered the Australian Natives' Association were trying to enlist the sympathies of the working men for political purposes.

Mr. G. Hawke (Order of Royal Foresters) said they must either ask the Australian Natives' Association to withdraw or the Friendly Societies Association must fight the battles of the Australian Natives' Association. They had no dispute with the doctors, and consequently no battles to fight. He supported the motion.

After further discussion, the motion was ruled out of order, as this was a special meeting to discuss the letter from the British Medical Association, and the motion moved had not been placed on the business paper.

According to a report in the *Newcastle Morning Herald and Miners' Advocate*, April 28th, at a recent entertainment of the Grand Lodge officers of the Protestant Alliance of New South Wales by the local lodges in Newcastle, the Australian Natives' Association came in for some hard hits by the speakers. The Grand Master is reported to have said that "any man or body of men who endeavoured to sow the seeds of discord between legitimate friendly societies and the medical profession did irreparable injury to society."

The Deputy Grand Master is reported to have said that "there was no doubt that the Australian Natives' Association was gaining ground in New South Wales; but as surely as the Australian Natives' Association had quickly risen so surely would it fall. Instead of being a friendly society the Australian Natives' Association was a political organisation, and was established as such in the first instance. It had only adopted the name of friendly society for the purpose of gaining strength. The Australian Natives' Association was aiming at cutting the ground from under the feet of the real friendly society. The Protestant Alliance and other friendly societies would have to awaken to a sense of duty."

The Grand Secretary is stated to have said that "notwithstanding the hard efforts made lately by the Australian Natives' Association its recent conference proved that its members were a set of wranglers. The British Medical Association had done quite right in the step it had taken in regard to the Australian Natives' Association, which was trying to 'swat' the medical profession. The Australian Natives' Association had evidently mastered the profession in Victoria, but he did not think that it would succeed in doing so in New South Wales."

OBITUARY.

William Snowball, M.B., Ch.B. Melb., Carlton, Victoria.

We regret to record the death of Mr. William Snowball, M.B., which occurred on April 22nd at Narracan, Gippsland. Mr. Snowball was a native of Carlton, the suburb in which he passed the greater part of his life, and was only 47 years of age at the time of his death. He was educated at the Church of England Grammar School and at the Melbourne University, passing his final examinations before reaching the age of 21. He had, therefore, to wait until he attained his majority before he could obtain his degree. This was conferred upon him in 1875, and shortly afterwards he proceeded to England, where he spent two years studying the diseases of children. On his return to Melbourne, he became resident surgeon at the Children's Hospital, and subsequently he relinquished that position for one on the honorary staff. For many years past he has been senior medical officer and chairman of the staff. He was an enthusiast in the work of the hospital, spending all his spare time in advancing its interests, and on all occasions placing his private practice in a secondary position. When failing health came upon him at the beginning of last year, his principal thoughts were for the institution, to which he was unable to give so much attention as formerly. An indefatigable worker, a man of great force of character and a quick master of details, Mr. Snowball for years past stood pre-eminent among the specialists of the diseases of children in this country. His advice was greatly esteemed by the committee of the Children's Hospital, and in teaching and assisting the students and younger members of the profession he endeared himself to all. At the time of his death, Mr. Snowball was a member of the Medical Board of Victoria, and the representative of the Children's Hospital on the Faculty of Medicine. On relinquishing practice in Victoria Street, Carlton, in January last, he went to live on his farm, "Nanoo," Narracan. He was then suffering severely from chronic nephritis and failing heart, and among the members of the profession best acquainted with him he was regarded as a doomed man. He leaves a widow and five children. The funeral was largely attended on Thursday,

April 24th. His remains were brought to town from Narracan, and borne thence to the General Cemetery. In the procession were many representatives of the medical, legal, and literary professions, among whom he had numbered not a few intimate friends. Not a doctor of any standing in Melbourne was absent, who could get away from his engagements. The bar was represented by some of its most noted members. The pall-bearers were Senator Simon Fraser, Mr. Purves, K.C., Dr. John Williams, Colonel Charles Ryan, Dr. Maudsley, Dr. A. Davenport, Mr. Herbert Syme, Dr. Wray, and Mr. S. G. Pirani.

A very old resident of North Sydney, in the person of Dr. Robert Dalzell Ward, died on 2nd May. The deceased, who was considerably over 80 years of age, had been in failing health for some time. Dr. Ward was the oldest medical practitioner on the North Shore, and was one of the pioneers of the district. Several years ago he retired from practice, though he continued to be a member of the New South Wales Medical Board. The funeral took place on 3rd May at St Thomas' Church of England Cemetery, North Sydney.

Dr. R. H. K. Bennett, of Gulgong, N.S.W., died on April 21st, from congestion of the lungs. He came to Gulgong from New Zealand in 1870, and was the first medical officer to the hospital.

Charles James Hill Wray, L. & L. Mid., R.C.P. & R.C.S. Edin.

We have to record, with extreme regret, the death at Brisbane, of Charles James Hill Wray, L. & L. Mid., R.C.P. & R.C.S. Edin., aged 55. Dr. Wray was educated at Belfast and Edinburgh, and became qualified in 1870. He served at sea for some years on the West Coast of Africa, and in the United States Mail Service, and also in the Queensland Immigration Service. In 1879 he obtained the appointment of Government Medical Officer at Brisbane, which he held until the time of his death; and until 1901, when the condition of his health urgently demanded rest, he had not, during the whole period had a holiday. He died of plague, contracted in the performance of his duties. He was unmarried. His funeral was attended by representatives of the Government, the medical profession, the police, the crew of the s.s. "Otter," and many others, all of whom evinced sincere grief at the loss of an esteemed and reliable friend.

PUBLIC HEALTH.

Queensland.

Brisbane Vital Statistics.—During the month of February, 1902, 109 births were registered in the district of Brisbane, the number being 33 less than in the previous month; and 63 deaths were recorded, the excess of births over deaths being 46. The number of deaths was 29 less than was registered in the previous month. Within the municipality of Brisbane 35.00 per cent. of the deaths were of children under five years of age. The chief causes of death were zymotic diseases, 12; constitutional diseases, 15; local diseases, 55 (enteritis, 19).

Prevention of Consumption.—A meeting of the executive of the Queensland Association for the Prevention of Consumption was held in Brisbane last week. The prevalence of consumption among aborigines was dealt with, and Dr. Roth, protector of aborigines in North Queensland, gave particulars of

several striking instances of spread of the disease from one aboriginal to another. It was decided to take all possible steps to prevent spread of disease among aborigines. The question of improving the accommodation for advanced consumptives was discussed, attention having been drawn to this matter by a letter from a patient in an advanced stage of the disease. The patient detailed the hardship he was suffering in not finding admission to any of the charitable institutions. It was also pointed out that Diamantina Hospital for chronic diseases was full. At any rate, the accommodation was totally inadequate for the number of cases calling for attention. It was decided to bring this particular case under the notice of the Government; also the advisability of having several inexpensive wings built in connection with some of the country hospitals for the treatment of consumptives. By such additions the strain upon the Dalby Sanatorium and Diamantina Hospital would be considerably relieved.

Bubonic Plague. Report for week ending 10th May, 1902:—Remaining under treatment, 26th April, 18; reported during week, 9; discharged recovered, 8; died during week, 4; remaining under treatment, 10th May, 26. Total number of cases reported to date, 74; total number of deaths, 23; total discharged recovered, 26. Total number of contacts isolated, 411; Number of cases among contacts, 4. Brisbane, 72 cases; Rosewood, 1 case; Townsville, 1 case.

Tasmania.

Vital Statistics.—The Government Statistician's report on vital statistics of the State shows that during the month of March, 1902, 131 births were registered in the registration districts of Hobart and Launceston. This is fifteen more than in the corresponding month last year; and an increase of 10.6 as compared with the average of the births registered in March during the last five-yearly period. The deaths registered in March, in Hobart and Launceston, numbered 60. The total number of deaths registered in the two districts is five less than in the corresponding month last year, and shows a decrease of 24.4 as compared with the average number of deaths registered in March during the last five-yearly period. The deaths under five years of age numbered 12, or 20.00 per cent., of which 10 were under one year of age.

Cascade Hospital.—The secretary stated that during the month of March, 36 scarlet-fever patients were admitted to the isolation hospital at the Cascades, but no deaths had resulted. At the present time there were 37 patients in the hospital.

Victoria.

The Health of Melbourne.—The annual report of the City Health Officer, Dr. Jamieson, has been circulated by the corporation. The rate of mortality for the year is found to be 15.7 per 1000, as against 12.97 in 1900, and 19.1 per 1000 in 1891. Last year's mortality from epidemic diseases, though in the main favourable, was higher than in 1900. The cases notified were—typhoid, 86; diphtheria, 91; scarlet fever, 15. The births, exclusive of those in the Lying-in Hospital, were 1284, as against 1218 in 1900. The highness of the infant mortality—viz., 134 per 1000, is excused by Dr. Jamieson as "partly owing to an epidemic of whooping cough." In dealing with the milk trade, the best that Dr. Jamieson can say of the

premises used by the thirty cow-keepers and fifty-four purveyors of milk in the city is that they are in "fair sanitary condition." Out of sixty-three samples of milk analysed by Mr. Dunn only five passed the "standard" allowed, and only twenty-five passed the "limit" allowed. Three of the samples, it is reported, contained 9 per cent. of added water and fifteen were below the minimum percentage of non-fatty solids.

Vital Statistics, Melbourne and suburbs.—for March, 1902, show that 972 children were born during the month, the number being the lowest recorded during the last 18 years, and 261 below the average of the month during the previous ten years, or 345 below it if allowance be made for the increase of population. The deaths registered during the month numbered 588, the births thus exceeded the deaths by 384, or 65 per cent. The number was 26 more than in March, 1901, but the lowest recorded for the month during the last 11 years except 1895, 1897, and 1900. It was also 78 below the average of March during the previous ten years, or 122 below it, allowing for the increase of population. Children under five years of age contributed 31 per cent. to the mortality, the lowest mortality during the last ten years. The deaths of infants under twelve months numbered 144, as compared with 140 in March, 1901. The rate of infant mortality was 148 per 1,000 in the month under review, as compared with 126 in March 1901, 116 in 1900, 165 in 1899, 174 in 1898, 124 in 1897, 143 in 1896, 137 in 1895, 149 in 1894, 186 in 1893, and 180 in March, 1892. Seventy persons—whose deaths were recorded—as against 47 in March, 1901, had attained or passed the age of 75 years. The deaths of children under five years of age numbered 184. The chief causes of death were, zymotic diseases 49, or 8.33 per cent.; constitutional diseases 118, or 20.07 per cent. (cancer 37, phthisis 57); developmental diseases 49, or 8.33 per cent. (premature birth 20, old age 21); local diseases 314, or 53.41 per cent. (diseases of the nervous system 54, diseases of the circulatory system 76, heart disease undefined 30, pneumonia 22, enteritis 63). A statement of the deaths occurring in Melbourne and its suburbs from diphtheria and typhoid fever from 1892 to March, 1902. Diphtheria.—The total for each year ranged from 151 in 1897, the maximum, to 35 in the year 1893. In 1901, the number was 45. Typhoid fever.—The death-rate varied from 222 in 1898, the maximum, to 69 in 1901, the minimum.

Bendigo and Suburbs.—The return of births and deaths registered in Bendigo and suburbs during March, 1902, shows that 83 births occurred; in the previous month the births registered were 117. The deaths numbered 71, births thus exceeding deaths by 12. In the previous month the deaths recorded were 72. Of the 71 deaths recorded, 28, or 39 per cent., were of children under five years of age. The chief causes of death were, zymotic diseases, 11 (enteric fever 6); constitutional diseases 16 (phthisis 8); developmental diseases 9 (premature birth 5, old age 4); local diseases 25 (enteritis 9).

Ballarat and Suburbs.—During the month of March, 1902, the births numbered 106; the deaths recorded were 103. The chief causes of mortality being, from zymotic diseases, 11; constitutional diseases, 10; local diseases 67 (enteritis 24). As compared with the corresponding month of the previous year, the deaths from typhoid fever fell from 4 to 1; and those from cancer from 5 to 3.

South Australia.

Vital Statistics.—There were 651 births registered in South Australia, exclusive of the Northern Territory, during the month of February, 1902, this being at the rate of 181 per cent.; the average for the same period during the last five years being 679. In the same month 314 deaths occurred, the rate being 1087 per cent.; the average death rate for the five years being 339. Of these 314 deaths, 76 were of children under one year of age. The chief causes of death were: zymotic diseases 51 (enteric fever 17, diarrhoea 15), constitutional diseases 59 (cancer 15, phthisis 25), developmental diseases 30 (old age 19), local diseases 160 (apoplexy 10, diseases of the nervous system 11, of the circulatory system 30, enteritis 24).

Adelaide Vital Statistics.—In February, 1902, 68 births were registered in Adelaide, the average for the previous five years being 70 for that month. During the same month 65 deaths occurred, the average for the five years being 73; of these 65 deaths 12 were of children under one year. The chief causes of death were zymotic diseases 14 (6 enteric fever), constitutional diseases 17 (phthisis 7), local diseases 22.

New Zealand.

Vital Statistics.—The births registered in the four principal towns of New Zealand during the month of March, 1902, were 410, against 460 recorded in February, 1902. The deaths in the month were 205, a decrease of three on the number in February. Of the total deaths 85 were of children under five years of age, being 41.46 per cent. of the whole number; 72 of these were under one year of age. The chief causes of death were zymotic diseases 39, constitutional diseases 29, local diseases 93.

New South Wales.

For the quarter ending 31st March, 1902, the births numbered 3,063, and the deaths were 1,371, which are respectively 66, and 6 more than the average numbers registered for this quarter during the previous five years. The deaths from zymotic diseases numbered 175 (bubonic plague, 22; whooping cough, 38; typhoid, 28; diarrhoeal diseases, 35). Constitutional diseases, 232 (cancer 86; phthisis, 100). Developmental diseases, 100 (premature births, 43; old age, 42). Local diseases, 705 (apoplexy, 45; endocarditis, 44; heart disease, undefined, 41; pneumonia, 45; bronchitis, 25; enteritis, 158). In the zymotic group the death rate is of a normal character. In constitutional diseases, with the exception of cancer, there is a decrease generally. Developmental diseases show a slight advance. The most material divergence from the normal in local diseases is in the circulatory group, 137 deaths against an average of 95 for the previous five years. This increase is probably due to the diagnosis of complaints of the heart being more clearly defined of late years. Diseases of the digestive system give a lower death rate than has been experienced for some years, but there is still a very high mortality from enteritis—158.

During the month of April, 1902, 1,096 children were born in Sydney and its suburbs. This total is 110 greater than the average for April during the previous five years. The deaths during the month

numbered 472, or 26 more than the quinquennial average for April, leaving a balance of births over deaths of 624, the birth rate being 2.18 per 1,000, and the deaths .94 per 1,000. The true infantile mortality compared with the births for the month was at the rate of 115 per 1,000. Of the 472 persons who died, 154, or 32.6 per cent. were under 5 years of age; and 126, or 26.7 per cent. were less than 1 year old. Zymotic diseases caused 37 deaths (diarrhoea, 15; bubonic plague, 4; typhoid, 4). Constitutional diseases, 96 deaths (phthisis, 50; cancer, 28). Developmental diseases produced 41 deaths (premature births, 23).

Vital Statistics, Newcastle.—The births for the quarter ended 31st March, 1902, numbered 474, and the deaths 182. During the month of April there were 164 births recorded in the Newcastle district, or at the rate of 2.94 per 1,000. The deaths numbered 76, or 1.36 per 1,000 of population. Of these deaths 35 were due to local diseases, 6 to developmental, 9 to zymotic, and 11 to constitutional. Thirty-seven per cent. of these deaths were of persons under 5 years of age, and 21 were less than 1 year old.

Diphtheria at West Maitland.—An outbreak of diphtheria is reported from Pelawmain and Buchanan, thirteen cases having occurred during the first week of this month, but fortunately none of the cases have so far proved fatal. Dr. Dick, Government Medical Officer, is investigating the epidemic, which is said to be due to the use of impure water.

Typhoid Epidemic at Inverell.—Typhoid fever is at present raging in Inverell. There are twenty cases in the hospital, besides a number of other cases in private hospitals.

Scarlet Fever Epidemic at Hay.—Scarlet fever is raging at Hay in epidemic form, and the School Board has recommended the closing of the school.

The Bubonic Plague.

We regret to report that the bubonic plague still continues in an epidemic form in some of the large cities of the Commonwealth. In Sydney the number of cases in the present outbreak up to date is 128; of these 36 have proved fatal. It would appear as if the infection amongst the rats was wide-spread, since every now and then we read of plague-infected rats being discovered in different parts of the city and suburbs. Dr. Ashburton Thompson has pointed out that the suburban councils have not acted with the degree of vigor the occasion requires, and as one proof of this may be taken the report of the sanitary inspector in Woollahra, who recently found no less than 48 out of about 290 houses inspected, to be swarming with rats. Unless some more stringent regulations are enforced, and some severe punishment inflicted for rats being found on any premises, cases of plague will continue to occur in our midst, and the deaths will be laid at the doors of the citizens who are too indifferent to the health of their fellow-citizens to lay a little rat poison, or attempt to catch the rats in traps. We have to thank the officials of the Board of Health for escaping, so far, a very severe epidemic of the disease, for if it were not for their watchful care over the insanitary areas of the city, and the prompt measures resorted to, a much larger number of cases would have occurred.

A new feature in the epidemic during the past month has been the deaths of several animals at

the Zoological Gardens from plague. The exact path of infection has not been clearly traced, but it is probable that plague-infected rats have wandered from the Moore Park "tips" to the Gardens. During the cleansing operations at the Gardens some dead rats were discovered under the flooring of one of the houses. On the announcement of the outbreak of plague at the Sydney "Zoo," Dr. Gresswell, the Chairman of the Board of Health in Melbourne, visited the "Zoo" in that city, and, as a result, the Zoological Society was informed that, in his opinion, attention should be directed to the rectification of unwholesome conditions, and particularly to the extermination of rodent vermin. Dr. Gresswell incidentally referred in his letter to the fact that the monkey enclosures might be a means for disseminating tuberculosis amongst visitors.

The disease still continues prevalent in Brisbane, and we regret to record the death of Dr. Wray, the Medical Officer of Health, after a few days' illness, from it. We also regret to learn that Dr. Maclean, the senior resident medical officer at the Brisbane Hospital, is suffering from the disease, and is in a precarious state. It is said that in his case the symptoms developed rather suddenly after examining a patient suspected of suffering from the disease in the out-patient department of the hospital. In consequence of the prevalence of the disease in the large cities, it is only to be expected that stray cases will occur in the country districts. One undoubted case has occurred in Bowra, a small town on one of the Northern rivers in New South Wales. Country practitioners should therefore be on the alert when called to any case of sudden serious illness in a person who has recently arrived from a plague infected area. Every precaution is taken to prevent the extension of the disease to the country districts by the committees of the Carrington Convalescent Hospital, and of the Thirlmere Hospital for Consumptives. In each case patients who are sent up to these hospitals are examined specially beforehand to make sure that they are not suffering from plague. We hope that all medical practitioners will do their utmost to impress upon their patients the serious position of affairs at present in regard to the continuance of the plague in our midst, and induce them to use every effort to destroy the rats on their premises, and aid the officials of the Board of Health in every possible way. The presence of the disease is not only a source of danger and death, but is also a source of much inconvenience to business people, and interferes very considerably with trade. So that for every reason, both selfish and altruistic, we must each do our share in helping to stamp out the disease.

HUDSON'S "EUMENTHOL" JUJUBES (Registered) are a Gum Jujube containing the active constituents of well-known Antiseptics, Eucalyptol, Thymus Vulg., Pinus Sylvestris, Mentha Arv., with Benzo-Borate of Sodium, etc., and exhibit the antiseptic properties in a fragrant and efficient form. Sold by all chemists, tins 1s. 6d. Are Antiseptic, Prophylactic, reduce Sensibility of Mucous Membrane.

Mr. W. A. Dixon, F.I.C., F.C.S., Public Analyst of Sydney, after making exhaustive tests, says:—"There is no doubt but that "Eumenthol" Jujubes have a wonderful effect in the destruction of bacteria, and preventing their growth. . . . I have made a comparative test of "Eumenthol" Essence and Cresote, and find that there is little difference in their bactericidal action."

UNIVERSITY INTELLIGENCE.

The University of Sydney.—The Senate of the University met on May 5th. The following degree was conferred:—Master of Surgery (Ch.M.), Fritz William Webb. The following degrees were conferred *in absentia*:—Doctor of Medicine (M.D.), John Burton Cleland, M.B.; Master of Surgery (Ch.M.), Edith Ure, M.B. A letter from the British Medical Association, making application for the use of the Great Hall for a *conversazione* was granted under the usual conditions.

University of Melbourne.—At the University council meeting on April 14th, a letter was read from the Secretary for Agriculture, expressing the wish of the department that Dr. Cherry should be appointed dairy expert and bacteriologist to the department, while still retaining his position as lecturer in bacteriology. It was explained that Dr. Cherry had, up to the present, performed the bacteriological work of the department at the University, and that it was proposed to maintain and extend the work. The council expressed its general consent to the appointment, and empowered the finance committee to make the necessary arrangements. Dr. Morrison proposed that, in view of the great loss to medical education which the resignation of Dr. Martin, Acting Professor of Physiology, would cause to the University, he be urged to remain. He stated that Dr. Martin had received an offer from the Belfast University. After discussion, during which it was stated that the loss of Dr. Martin would be disastrous to the University, it was decided that the Chancellor be empowered to inform him that he would be treated liberally in the matter of leave of absence to make investigations abroad, and that it was the desire of the council that he should succeed to the chair of physiology.

University of New Zealand.—The Senate of the New Zealand University held their annual session in Dunedin recently, when the appointment of the following medical examiners was confirmed:—Biology, Professor Thomas, Auckland; Physics, Professor Shand, Dunedin; Organic and Inorganic Chemistry, Professor F. D. Brown, Auckland; Anatomy, Professor Scott and Dr. E. E. Bloomfield, Dunedin; Physiology, Dr. W. K. Fyffe, Wellington, and Professor Scott, Dunedin; Pathology, and Morbid Anatomy, Drs. W. S. Roberts, Dunedin, and W. K. Fyffe; Materia Medica, Drs. E. E. Bloomfield and F. Hay, Dunedin; Surgery and Clinical Surgery, Drs. L. Barnett, Dunedin, and T. Young, Invercargill; Medicine and Clinical Medicine, Therapeutics, and Insanity, Drs. D. Colquhoun, Dunedin, and W. Fell, Wellington; Medical and Surgical Anatomy, Professor Scott, Dunedin, and Dr. E. E. Bloomfield, Dunedin; Midwifery and Diseases of Women, Drs. F. C. Batchelor, Dunedin, and B. Moorehouse, Christchurch; Medical Jurisprudence and Public Health, Drs. F. Ogston, Dunedin, and F. Truby King, Dunedin.

The University of Adelaide.—At a meeting of the council of the University of Adelaide, held on May 2nd, on the recommendation of the finance committee the tender of Mr. C. H. Martin for the erection of the new buildings for the medical school was accepted. The report from the Faculty of Medicine submitting schedules A and B of the new M.B. and B.S. regulations was approved.

HOSPITAL INTELLIGENCE.

Melbourne Hospital.—At the meeting of the committee of the Melbourne Hospital, on April 22nd, Dr. J. W. Barrett was appointed hon. consulting oculist, and Dr. W. Kent Hughes hon. consulting aurist. Drs. H. J. Holmes, J. F. C. Mackenzie, H. Gilbert, K. Hiller, Edith H. Barrett, J. F. Harris, W. G. H. Tregear, Annie S. Robertson, were appointed resident medical officers for the current year. The newly-appointed residents were the first eight on the University honors list. A donation of £700 from the trustees of the estate of the late T. J. Sumner was received. In an accompanying letter permission was given to use £300 of the money towards the purchase of surgical instruments, which are badly wanted at the institution. A letter was also received from Dr. Charles Ryan, who stated that after twenty-two years' work, during which period he had been attached to the hospital, he intended shortly to leave for England and the Continent. While visiting London and Paris he would, if it was the wish of the committee, select and purchase, on their behalf, the latest and best surgical instruments procurable. The offer was unanimously accepted, and the secretary was instructed to forward the committee's cordial thanks to Dr. Ryan for his offer.

Sydney Hospital.—At the last monthly meeting of the Board of Directors leave of absence for two months, on account of ill-health, was granted to Dr. Goode. A communication was received to the effect that Dr. William Chisholm had been appointed as one of the representatives of the hon. medical staff on the board of directors, in place of Dr. Jenkins, who is proceeding to England on leave. Dr. Chisholm was also appointed a member of the house committee.

The new wing of the Queen Victoria Hospital, Melbourne, built in commemoration of the visit of the Duchess of Cornwall and York (now Princess of Wales), will be opened by Lady Clarke on Monday, May 12th.

The Fever Hospital, Melbourne.—Two years ago the building was completed, but there was no money to furnish it. Ultimately the Government was approached, and, at the meeting of the Melbourne Hospital committee on April 22nd, a letter was received from Mr. H. W. Meakin, the under-treasurer, in reply to a communication from Mr. T. B. Andrews, the secretary of the Melbourne Hospital, asking when the Fever Hospital would be opened, which stated that furniture was now being obtained, and that the hospital would be ready for the reception of patients in about two months' time. The reply was received with feelings of gratification by the Melbourne Hospital committee, for at present the whole of the diphtheria, scarlet fever, and measles cases of Victoria are taken to the Melbourne Hospital, as all other institutions refuse to admit such cases.

Western Suburbs Cottage Hospital, Sydney.—The works committee have urged the adoption of the following recommendations:—That a new operating theatre be built at a cost of £405, and a new wardman's room at a cost of £60; also that £10 be spent in converting the old theatre into bedrooms. This report has been adopted.

St. Margaret's Maternity Hospital, Sydney.—A movement has been started for the expansion of St. Margaret's Maternity Hospital, Elizabeth Street,

Sydney, and a Committee has been formed for the purpose of securing a suitable site and building.

Hobart Hospital.—At the last meeting of the Board of Management of the Hobart General Hospital a letter was received from the Chief Secretary, enclosing copy of a reply which had been received from the Chairman of the Board of Management of the Launceston General Hospital to a letter of this Board's of the 16th April, on the subject of the alleged inaccurate statement appearing in the *Nursing Record* over the signature of "J. H. Milne." The Hobart Board's letter had stated that the reply received was not considered by any means satisfactory, and that it was resolved that Miss Milne's explanation be not accepted till she disclosed the source of information. The Chairman of the Launceston Board (Mr. F. Stanfield) now stated that when the matter first came before them the general opinion was that Miss Milne had committed a grave error in forwarding a statement to the editor of the *Nursing Record* regarding the course of training for nurses in the Hobart Hospital, without having first obtained official information on the subject, and up to this point it was considered that the Hobart Hospital Board had just grounds of complaint. Miss Milne had already expressed regret at the inaccuracies and also her readiness to make the necessary correction in the *Nursing Record* if the Hobart Board would supply her with reliable information. He was therefore of opinion that Miss Milne's letter met all reasonable requirements, and regretted that the Hobart Board did not so regard it. The Launceston Board, on the 24th April, passed the following resolution:—"That this Board, while regretting the disparagement of a sister institution, deem it inexpedient to assist in promoting a personal discussion thereon." Miss Milne's own reply to the Hobart Board's letter was also enclosed, and in it she said she regretted that her report upon the subject of discussion was not considered satisfactory. She respectfully declined to disclose the name of her informant. Her letter to the Lady Superintendent of the Hobart Hospital was sent early in January, 1901, and was the second letter addressed by her to that lady upon professional matters, to which she had not received any reply. The Chairman said he did not think they ought to pursue the matter further, and the subject then dropped.

MILITARY INTELLIGENCE.

NEW ZEALAND.

Dr. Harold Guthrie McAllum has been appointed Surgeon-Captain on the New Zealand Volunteer Medical staff.

Dr. George Edward Anson has been appointed Surgeon-Captain on the New Zealand Volunteer Medical staff.

Surgeon John Wilkins has resigned from the New Zealand Permanent Militia (Auckland).

Colonel Williams, the Inspector-General of the Army Medical Corps, is at present in Brisbane on a tour of inspection.

Lieutenant-Colonel McWilliams, of West Australia, has been selected to accompany the Commonwealth Contingent to the King's Coronation, as representative of the Federal Army Medical Staff.

The Beane Scholarship in Surgery, open for competition at the Final Honor in Medicine and Surgery, at Melbourne University, has been awarded to Samuel William Henry Summons, while Honorable Mention is awarded to Edith Helen Barrett.

MEDICAL NOTES.

The Plague in India.—Again a further increase is reported from India in the mortality from plague. No fewer than 12,192 deaths occurred during the first week of February, as compared with 11,445 for the previous week, and 3,415 for the corresponding week of 1901. The greatest increases in the numbers of cases have taken place in Bombay, the Punjab, the North-West Provinces, and Bengal. The returns from Bombay and Calcutta go to show that in both cities the disease is virulent and progressive. The evidence with regard to the value of inoculation is very conflicting, but the method seems to have been carried out so loosely—being pushed in a few places, and absolutely rejected in others—that no reliance can be placed upon the results obtained as affording anything like conclusive proof either for or against it.

Charitable Bequests.—The trustees of the late T. J. Sumner, of Melbourne, have distributed the following sums amongst the undermentioned charitable institutions:—Melbourne Hospital, £700; Women's Hospital, £400; Children's Hospital, £200; Austin Hospital for Incurables, £100; Benevolent Asylum, £100; Eye and Ear Hospital, £100; Brunswick Creche, £75; Infant Asylum, £75; Alfred Hospital, £50; Queen Victoria Hospital, £40; Consumptive Sanatorium, £40.

Queen Victoria Home for Consumptives Fund.—The tender of Mr. W. J. Knight for the erection of the building for the sanatorium for the treatment of patients of the poorer classes, suffering from pulmonary tuberculosis, etc., in the early stages, has been accepted for the sum of £2,430. The building is to accommodate twenty male patients, and is being built on the land purchased from Mr. Kelso King at Wentworth Falls, New South Wales. The present cottage, which is commodious and of modern design, is being utilised for administrative purposes. Dr. McIntyre Sinclair, assistant medical officer at the Cotswold Sanatorium, near Gloucester, England, has been selected for the post of Resident Medical Officer.

Death of Professor Kaposi.—Professor Moriz Kaposi died on April 6th, and the Vienna Medical School has lost its most celebrated member. He was the greatest authority of his time on skin diseases. He and his father-in-law, the late Professor Hebra, were the founders of modern dermatology. Kaposi's clinic was the largest in the world. He had students and patients from all parts of the earth.

PERSONAL ITEMS.

A CORRECTION.—In the last issue of the *Australasian Medical Gazette*, Dr. H. H. McWilliams was reported to have left Bairnsdale for Waratah, Tas. We regret that an error was made, since Dr. McWilliams was merely acting as *locum tenens* for Dr. Faulkner, during his holiday last month. He is not residing in the district of Waratah.

DR. SCOTT, of Warnambool, Victoria, who some years ago was a member of the Legislative Assembly, has just attained his 60th birthday, and has entertained a number of his brother medics and other gentlemen in celebration of the event. He was presented on the occasion with a handsome French clock.

Colonel C. S. RYAN, principal medical officer of the Victorian military forces, has left for London for the Coronation celebrations. As no medical officers are to be attached to the Coronation Corps, Colonel Ryan will go in his civil capacity. At the meeting of the Melbourne Hospital Committee, on April 22nd, a letter was received from Colonel Ryan, offering to choose the latest instruments for the institution during his stay in England. The committee accepted the offer with thanks. Colonel Ryan has occupied a position on the honorary staff of the hospital for 22 years past.

Dr. ESSLEMONT, who has been practising at Wollongong for some time with Dr. Lee, has received an appointment as hospital surgeon in Victoria.

Dr. MASSEY, L.R.C.P., Lond., M.R.C.S. Eng., from Hillgrove, N.S.W., was appointed medical officer to the Queenstown Hospital Union, Tasmania, in place of Dr. Walpole, recently resigned. Dr. Hamilton is the other medical officer of the union. There were nineteen applications for the position.

Dr. T. J. LONERGAN has resigned his appointment as District Medical Officer and Public Vaccinator at Northampton, W.A.

Dr. BARCROFT, who formerly practised in Moss Vale, has returned after eight years' stay in England, and has succeeded to the practice of Dr. Basil Faulds, at Bowral.

Dr. BASIL FAULDS has succeeded to the practice of Dr. Bell, at Camden, N.S.W.

Dr. D. R. THOMPSON has settled at Scottsdale, Tasmania.

Dr. A. G. MEARES has commenced practice at Branholme, Vic.

Dr. STRATFORD SHELTON, who has been practising at Armidale, N.S.W., for some years, has commenced practice in Macquarie Street, Sydney.

Dr. E. J. JENKINS and Dr. Jarvie HOOD, left for London by the B.M.S. Ormuz, on 10th May.

Dr. WHISHAW, late of Croydon, England, has commenced practice at Hobart.

Dr. J. C. WINDEYER has commenced practice at College Street, Sydney.

Dr. LEWIS has resigned his position as Public Vaccinator for the Metropolitan district of Melbourne.

Dr. F. B. REID has removed from Boulder, W.A., to Montalban, (Q.)

Dr. R. C. H. FORSTER has succeeded to Dr. Bowland's practice at Narramine, N.S.W.

Dr. ARTHUR HALL (late senior house surgeon at the Dunedin Hospital) has left for London, where he will study for the M.R.C.S.

On February 24th, Dr. R. V. FULTON, who has resigned his position as medical officer to the Unity Lodge, Dunedin, was presented by the members with a silver breakfast combination, and a butter dish, as a mark of the esteem in which he was held by the lodge.

Dr. H. S. SCLA has removed to 28 College St., Sydney.

Dr. FRANK A. BETT, who took his M.B. degree at the Otago Medical School, and proceeded to London in June last, to further pursue his medical studies there, took the degrees of M.R.C.S. and L.R.C.P., in January. Dr. Bett left England, for Dunedin, on the 3rd of March, via Capetown and Melbourne.

Dr. G. CRAIG, of Waitekauri, was married at Auckland, on 19th April, to Miss Gudgeon, daughter of Lieutenant-Colonel Gudgeon, Raratonga.

Dr. SHARMAN, Port Health Officer, Auckland, who had been away in Australia for some weeks, returned by the Mararoa. During his absence Dr. Tracy Inglis carried on Dr. Sharman's port duties.

Dr. ALEX. W. FALOONER, prior to leaving Dunedin, as Surgeon-Captain of the Otago section of the ninth Contingent, was entertained at a farewell social by the residents of Leaclyff, and was presented with a purse of sovereigns and a case of surgical instruments.

Dr. A. WATSON MUNRO has removed to 159 Macquarie Street, next the Public Library, where he continues practice as usual.

Dr. R. H. TODD, Deputy City Coroner for Sydney, has obtained leave of absence for six months, and he left for England on 13th instant.

MEDICAL APPOINTMENTS.

The following Medical Appointments are announced :

NEW SOUTH WALES.

Dalton, Henry Moyer Cyril, M.B., C.M. Glas., to be Government Medical Officer and Vaccinator at Murrumburrah, *vice* Dr. L. D. Parry, resigned.

Faulds, Basil, M.R.O.S. Eng., L.R.C.P. Lond., to be Visiting Medical Officer Carrington Convalescent Hospital, Camden, *vice* Dr. Bell, resigned.

Mackellar, Hon. Charles Kinnaird, M.B., C.M., M.L.O., to be President of the State Children Relief Board *vice* the Hon. Sir Arthur Benwick, resigned.

VICTORIA.

Hewlett, Dr. H. M., to be Honorary Assistant Pathologist to the Benevolent Asylum, Melbourne.

Reid, Matthew Alexander, F.R.C.P. to be a Public Vaccinator for the Metropolitan District of Melbourne during the absence of George A. Branson, Esq., M.R.C.S., on leave.

SOUTH AUSTRALIA.

Hill, Alfred William, M.D., to be Honorary Surgeon to the Ear and Throat Department at the Adelaide Hospital.

Myles, William Saunders, B.A., M.B., to be a Public Vaccinator. Verco, Sydney Manton, M.B., M.S., to be a Public Vaccinator.

WESTERN AUSTRALIA.

Allan, Dr. Leslie Stuart, to be Resident Medical Officer at the Perth Public Hospital, *vice* James Thompson, M.B.B.S.

Corlie, Dr. J., to be Public Vaccinator for the Urban and Suburban Districts of Menzies, *vice* S. V. Duncan, transferred.

Ick, Dr. Theo. J., to be District Medical Officer and Public Vaccinator at Jarrahdale.

Ick, Dr. T. J., to be Officer of Health at Jarrahdale, *vice* Dr. Leochen, resigned.

Miskin, Dr. L. J., to be Acting District Medical Officer and Public Vaccinator, Coolgardie, during the absence on leave of Dr. W. P. Seed.

Randell, Dr. Allan E., to be Officer of Health at Melville.

TASMANIA.

Butler, Gilbert E., M.R.C.S., L.R.C.P., to be Health and Medical Officer for Zeehan, and Health Officer for Montagu, in succession to John Kennedy, M.D., resigned.

Butler, Gilbert E., M.R.C.S. Eng., to be a Public Vaccinator Registration District of Zeehan.

Pike, Dr. Charles J., to be a Vaccinator for the Registration District of Launceston.

Stewart, John, L.R.O.S. Irel., to be Public Vaccinator Municipal Districts of Hamilton and Bothwell.
Stewart, John, L.K.Q.C.P. Irel., L.R.O.S. Irel., to be Medical Officer of Health at Hamilton.

NEW ZEALAND.

Crawford, Dr. A. J., to be Assistant House Surgeon at the Christchurch Hospital, N.Z.
Cook, Sydney John, M.B., B.S., to be a Public Vaccinator for the District of Mount Cook.
McKelvie, Dr. O'Neill, to be Junior Medical Officer at the Seaciff Asylum, near Dunedin, N.Z.
Purchas, Frederick Maurice, M.B. Edin., to be a Port Health Officer for the Port of Kaipara vice Captain John Christy Smith, resigned.
Vowell, Charles Martin, M.R.C.S. Eng., L.R.C.P. Edin., to be a Public Vaccinator for the District of Opuake.
Watson, Frederick James, M.B., to be a Public Vaccinator for the District of Rangitikei.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

NEW SOUTH WALES.

Braccor, Augusto, M.D. Univ. Parma, 1900.
Crawford, Arthur William, M.B. Ch.B.A.O., 1897 R. Univ. Irel.
Cameron, Donald, M.B., Mast. Surg., 1890 Univ. Edin.

VICTORIA.

Brown, Edgar Jabez, M.B. Ch.B. Melb. 1902
Crawford, Arthur William, M.B. Ch.B. R. Univ. Irel. 1897.
Easlemont, John Ebenexer, M.B. Ch.B. Aberd. 1898.
Herlitz, Hermann, M.B. Ch.B. Melb. 1902.
Manners, Arthur, M.R.C.S.E. 1879, L.R.C.P. Edin. 1881.
Meinhold, Maximilian, Staats Exam. Bonn. 1900.
Pitt, Herbert Reginald, M.B. Ch.B. Melb. 1902.

Additional Qualifications Registered:

Adam, George Rothwell Wilson, M.D. Melb. 1902.
Chapman, Henry George, M.D. Melb. 1902.
Driado, Antonio Joseph James, Ch. B. Melb. 1902.
Forshaw, William Joseph, Ch. B. Melb. 1902.
Harris, John Richards M.D. Melb. 1902.
Kilington, Basil, M.D. Melb. 1902.
Lenon, Ferguson Augustus, Ch. B. Melb. 1902.
Mackeddie, John Fullarton, Ch. B. Melb. 1902.
Meyer, Felix Henry, M.D. Melb. 1902.
Putnam, Philip Timothy, M.D. Melb. 1902.
Ramsay, John, Ch. M. Melb. 1902.
Stirling, Robert Andrew, M.D. Melb. 1902.
Yule, John Sandison, M.D. Melb. 1902.
Zwar, Bernard Traugott, M.D. Melb. 1902.

Deceased Practitioner erased from Register

Snowball, William, M.B.

TASMANIA.

Savage, Vincent Wellesley, M.B. Syd. 1901.
Thompson, Daniel Robert, M.R.C.S. Eng.

WESTERN AUSTRALIA.

Roper, Arthur Leonard, L.S.A. Lond. 1892, M.B.B., B.S. Camb. 1894

SOUTH AUSTRALIA.

Hornabrook, Rupert Walter, M.B., B.S. Ad. 1896, M.R.C.S. Eng., and L.R.C.P. Lond. 1897.
Hunter, William Allen, M.B. Syd. 1901.
Keller, Peter Martin, M.D. Philadelphia, U.S.A. 1899.
Newland, Henry Simpson, M.B., B.S. Ad. 1896 F.R.C.S. Eng. and 1898 L.R.C.P. Lond. 1897.
Reissmann Charles Henry, M.B. Cantab. 1891, M.R.C.S. Eng., and L.R.C.P. Lond. 1898.

BIRTHS, MARRIAGES AND DEATHS.

BIRTHS.

CALDER.—On the 25th April, at Glenalvon, Manly, the wife of F. Calder, M.B., M.R.O.S., of a son.
DAVIDSON.—On the 14th April, at Sandgate, the wife of Dr. Guldiford Davidson, of a son.
FYFFE.—On the 3rd April, at Monarcho, St. Kilda, the wife of Dr. Chas. Fyffe, jun. (prematurely), of a daughter (stillborn).
HOGG.—On the 16th April, at Parramatta, the wife of C. A. Hogg, M.B., O.M., of twin daughters (prematurely).

KEARNEY.—On the 1st May, at Clifton, the wife of Dr. A. D. Kearney, of a daughter.

KINMONT.—On the 16th April, at Port Lincoln, the wife of Edward Kinmont, M.B., O.M., of H.M. Hospital, of a daughter.

NALL.—On the 18th April, at Bahere House, Clayfield, the wife of Dr. Nall, of a daughter.

SWEETAPPLE.—On the 16th April, at Mill Terrace, the wife of H. Algar Sweetapple, M.D., of a son.

REISSMANN.—On the 29th April, at Knutsford, Glenelg, the wife of Charles Reissmann, M.A., M.B., B.Sc., M.R.O.P., of a daughter.

SYME.—On the 19th April, at Belleville, Lilydale, the wife of Dr. A. E. Syme, of a daughter.

SYME.—On the 20th April, at 82 Collins Street, the wife of Dr. G. A. Syme, of a son.

MARRIAGES.

CLUBBE—EDWARDS.—On the 5th April, at St. Peter's, Melbourne, by the Rev. Ernest Hughes and the Rev. F. Anderson Charles P. B. Clubbe, of Macquarie Street, Sydney, to Gertrude F. Edwards, of Mittagong.

FFROST—ROBERTS.—On the 2nd April, 1902, at the Cathedral Church, Ballarat, by the Very Rev. Lynden Parkyn, Dean of Ballarat, Albert Ernest Frost, M.B. B.S. (Melbourne), eldest surviving son of J. R. M. Frost, of South Yarra, Melbourne, to Victoria, youngest daughter of the late J. Roberts, Abermule, Bond Street, Ballarat. No Cards.

HARDMAN—AFFLECK.—On the 23rd April, at St. James' Church, Sydney, by the Rev. Chas. E. Amos, Dr. Robert R. Hardman to Dr. Ada C. Affleck, second daughter of Mr. Thomas Affleck, of Manly.

TIDSWELL—JONES.—On the 17th April, at St. Paul's Church, Burwood, by the Rev. H. Bryant, Dr. Frank Tidswell, Principal Assistant Medical Officer to the New South Wales Government, to Edith Millie, third daughter of Mr. Richard Jones, of Burwood, New South Wales.

DEATHS.

BRANNIGAN.—On the 12th May, 1902, at Mount Morgan, Queensland, H. O. Brannigan, M.D., M.Ch.B.U., Ireland, L.R.O.P., L.R.O.S. Edin. Home, Indian, and South African papers please copy.

BOYD.—On the 16th April, at Lexham Gardens, South Kensington, London, Sprott Boyd, M.D., in his 89th year.

SCOTT.—On the 7th March, at his father's residence, Walter Livesley Scott, beloved son of C. M. Scott, M.D., J.P., F.R.C.S., Clarinda Park, county Dublin, grandson of the late Rev. James Burnett, Rector of Clonmethan and Prebendary of St. Patrick's Cathedral, and of Thomas Christian Scott, Firgrove, Ballybrack, and Island Bridge, Dublin.

SNOWBALL.—On the 22nd April, at Nahoo, Narracan, Gippsland, William Snowball, M.B., aged 47 years.

WARD.—On the 2nd May, 1902, at his residence, Dalsell, West Street, North Sydney, Robert Dalsell Ward, M.D.

NOTICES.

THE "GAZETTE" IS EDITED FOR THE PROPRIETORS BY GEORGE E. RENNIE, M.D., SYDNEY, N.S.W.; AND FOR THE OTHER BRANCHES OF THE BRITISH MEDICAL ASSOCIATION BY A. B. BROCKWAY, BRISBANE, Q.; H. W. BRYANT, WILLIAMSTOWN, VIC.; J. B. GUNSON, ADELAIDE, S.A.; HERBERT HORROCKS, PERTH, W.A. ORIGINAL ARTICLES WILL BE INSERTED SOLELY ON CONDITION THAT THEY ARE NOT CONTRIBUTED TO ANY OTHER PERIODICAL.

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Contributors will have to pay the cost of illustrations accompanying their articles.

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AUSTRALASIAN MEDICAL GAZETTE.

SCIENCE AND THE STATE, WITH SPECIAL REFERENCE TO TUBERCULOSIS AND THE PUBLIC HEALTH.

By Professor E. M. Crookshank, of London.

(An address delivered before the Royal Society of Queensland, May 22, 1902.)

Mr. President, Your Excellency, Ladies and Gentlemen,—

I consider it a great honour to have been invited to deliver an address before the Royal Society of Queensland, and it is also a great pleasure to comply with the request of the President and other scientific friends, who have shown me much hospitality and kindness during my visit to Australia. My time and thoughts have been more than occupied with the mission which has brought me to this country, and more especially with the disastrous condition of the pastoral industry, caused by the drought which is so seriously affecting the prosperity of Queensland and New South Wales. If, however, by complying with the request of the President, I succeed in the smallest way in giving encouragement to the scientific work which is being carried on in Queensland, I shall feel amply rewarded for the sacrifice of the little time which I have had at my disposal. It is especially gratifying to me to be associated in any way with the work of the Royal Society of Queensland, which, under the able presidency of Dr. Thomson and his distinguished predecessors, has done so much to spread scientific knowledge.

PRACTICAL VALUE OF SCIENCE.

In spite of the marvellous advances made by science during the past century, there are still those who question the practical value of many of its branches, and even if they do not oppose financial assistance on the part of the Government, they regard with little concern the retrenchments which have unfortunately to be made in various departments devoted to scientific research. I had occasion on my voyage out to Queensland to spend a few weeks in Java. In this tropical island agriculture has been carried on for centuries, and it might reasonably be supposed that such long experience had taught the inhabitants all that was worth knowing with reference to the cultivation of their land. A rich volcanic soil, abundance of mountain streams and rivers, a wonderful system of irrigation, and the labour of industrious peasants, have made Java the garden of

the East, and have enabled it to support a population which has increased from 3,000,000 at the beginning of the last century to about 25,000,000 at the present day. Yet with all these natural advantages I found it universally admitted by those engaged in the cultivation of coffee, tea, peruvian bark, rubber, rice, sugarcane and other crops, that the splendid results were largely due to the assistance given by the scientific researches conducted at the botanical gardens at Buitenzorg, and other experimental stations, under the able direction of Dr. Treub. The Government gives a very large subsidy for the maintenance of these gardens, which are admitted to be the finest in the world. Immense services have been rendered by the scientific staff in experimentally ascertaining the most suitable varieties of plants for cultivation in Java, in chemically analysing their products, and in investigating insect and other pests, and suggesting the necessary remedies. To those who may call into question the value of scientific knowledge, especially as applied to agriculture I do not think it would be possible to give a more convincing answer than by referring to the practical results of the researches daily carried on in the science laboratories and experimental gardens in Java.

SCIENCE IN QUEENSLAND.

In Queensland the policy of combining science with practice in agriculture has by no means been lost sight of. The annual reports of the Department of Agriculture bear eloquent testimony to the excellent work carried on at the State farms, and by the whole of the scientific staff. If I may be pardoned for referring more particularly to those subjects which especially interest me, I would call attention to the invaluable work of the Government entomologist, Mr. Tryon, whose reports are models of careful scientific research, and are of the greatest practical importance. I cannot refrain from mentioning the work of two of my former pupils. I refer to Mr. Quinell, who, both as an instructor and an inspector, has proved his exceptional ability and fitness for the post he occupies, and to Mr. Pound, whose studies of cattle-tick and other diseases of stock have been of great value to the State. I can only regret that in some of the scientific departments the work should be hampered by very necessary retrenchment on the part of the Government. Reverting for one moment to the work of the Government entomologist, I observe with great satisfaction that attention is being

given to the insectivorous birds of Queensland. A few years ago I visited Jamaica and found it suffering greatly from the destruction of birds. I was informed that the sugar-cane plantations had been over-run with rats, and the mongoose was imported to destroy them. The mongoose spread over the island like the rabbit in New South Wales. The rats being exterminated, poultry yards were attacked, and finally the wild birds. Small black ticks now literally cover the vegetation in most parts of the island, and residents and visitors suffer from their attacks. It is now almost impossible to walk where there is pasture or vegetation of any kind without being infested with ticks. An attempt is being made to restore the balance of nature by first destroying the mongoose, and then reintroducing birds to destroy the ticks. To avoid similar troubles, and in the interest of agriculturists and horticulturists, it is very desirable to put a stop to the continuous destruction of birds in Queensland. In addition to existing legislation something, perhaps, might be done to prevent indiscriminate slaughter of wild birds by imposing a gun tax. A license to carry a gun, and a license to kill game, would meet with the approval of all true sportsmen, and produce a substantial revenue, a part of which might be allocated to supporting and extending the scientific departments of the Board of Agriculture. The too sweeping destruction of trees in clearing the scrub for cultivation of the soil is also a matter which I think deserves attention.

THE TRAINING OF MEAT INSPECTORS.

I shall have occasion later on to refer to the subject of meat inspection; but with regard to the work of this department of the Board, I trust that in more prosperous times the Government will be induced to place the system of meat inspection on a more scientific footing. On studying the statistics given by meat inspectors in the annual reports, I regret to say I have found them of very little scientific value. Thus, in one report of the carcasses of cattle inspected, the returns were as follows:—Out of 8,517 bullocks there were condemned for tuberculosis 62, actinomycosis 26, *cancer* 4. Out of 2,573 cows the rejections for tuberculosis were 39, actinomycosis 11, *cancer* 2. Out of 11,030 tongues the returns were tuberculosis 220, unfit 127, actinomycosis 33, pleurisy 19, *cancer* 6.

In another case the following statistics are given for tongues:—Of 11,703 bullocks there were condemned for tuberculosis 63, actinomycosis 185, *cancered jaw* 83. Out of 5,717 cows the figures were tuberculosis 36, actinomycosis 27, *cancered jaw* 6. In another series of tongues and pharyngeal glands condemned by the

inspector the results were given as follows:—30 per cent. tuberculosis, 60 per cent. actinomycosis, 10 per cent. ordinary abscess. You will observe that there is no record of cancer at all in the last series, and Inspector Quinnell states in his report that since taking charge there had not been a single instance in his experience of an animal being affected with cancer. I shall return to this matter again, but it is quite obvious from these reports that there is great need for uniformity and scientific knowledge.

Complete and thoroughly scientific reports of meat inspection are of the highest importance to the State of Queensland, which has to compete with the Argentine Republic and other countries. In England and on the Continent of Europe great importance is now attached to meat inspection, and the country which can supply meat and meat products obtained from carcasses which have been rigidly inspected in a thoroughly scientific manner will capture the markets. A reconstruction of the Board of Agriculture has been suggested in the press, and if this is carried out I trust that a distinct veterinary department of the Board will be created. This department should be controlled by a scientific and practical veterinarian, who would be responsible to the Minister of Agriculture for all matters relating to the diseases of stock, meat inspection, the control of public abattoirs, and the registration and inspection of dairies. Meat inspectors should be appointed who have undergone a special course of training. They should hold a certificate as a guarantee to the public that they are fully qualified for the work they undertake. To obtain this certificate they ought to pass through a course of instruction in anatomy, pathology, and veterinary State medicine. Anatomy is of great value in training the mind and the eye. It is an exact science, and the mind is not disturbed by new theories and a variety of opinions. It encourages close observation, requires an accurate memory, and trains the hands in delicate manipulations. In pathology special attention must be given to practical training in the use of the microscope for the detection of micro-parasitic diseases. The inspector must also have a thorough, practical knowledge of sanitation applied to abattoirs, stock management, and the preparation of meat foods, and a sound knowledge of the legislation affecting meat and dairy inspection, which will enable him to use the powers he possesses under various Acts of Parliament.

Legislation must not, however, be regarded as the only means of protection in all matters relating to the public health. The public must be educated and encouraged to voluntarily

carry out sanitary measures. I have the greatest confidence in the substratum of common sense characteristic of the British race. I do not believe in encouraging too much dependence upon State regulations and State control. If I might venture to say so, I think in Queensland too much is expected from the Government. State control can be carried a great deal too far. Legislation may often prove harassing and vexatious, and the very object we have in view may be strangled in a tangled web of red-tape. Too much dependence upon State and municipal regulations is not healthy; it tends to destroy individual enterprise and initiative, and may in times of emergency produce a panic by exposing the public to conflicting interests and divided control, and involve a great waste of public money.

THE SOCIETY FOR PREVENTION OF CONSUMPTION.

Attempts are, however, being made to deal with sanitary reforms by voluntary effort. I refer to the formation of the Queensland Society for the Prevention of Tuberculosis. Its main object is to educate the general public concerning the origin and spread of tuberculosis, and to obtain co-operation with the medical and veterinary professions. I trust that the very influential committee will meet with the support it deserves, and that this society, which my friend Mr. Thynne has so much at heart, will prove a success. Though there may be points of detail in the programme with which all may not agree, yet all should combine to help on a work which has for its object the cure and prevention of such a terrible disease as consumption. I should like to see the work carried on entirely by the aid of subscriptions from the public. The Government have made a grant of £50, but is it not a mistake to apply to the Government for help? I would rather base the appeal to the public for subscriptions upon the fact that it is entirely dependent upon them, and I am sure the appeal will not be in vain. There are only 100 members at present, and this is not at all an indication of the interest taken in fighting a disease which not only involves so much suffering and distress, but, perhaps more than any other, appeals to human sympathy.

BRISBANE UNIVERSITY.

There is another movement on foot in which the public should assist in order to promote and extend scientific knowledge in Queensland. We have to acknowledge the necessity for Government retrenchment, and it results in hampering and even stopping scientific work. If further retrenchment is necessary, and science continues to be entirely dependent upon

the Treasury, it may be starved to death. Is there no means of averting such a calamity? I understand that there has been for some time an idea of creating a university in Brisbane, and that the scheme hangs fire owing to the financial position of the Government. Is this not again an instance of too much dependence upon the State? Let the Government by all means be asked to give a large grant of freehold land in trust for the University, and, in more prosperous times, to give a subsidy towards its support; but will not private munificence endow professorships and scientific laboratories, the expenses of which cannot possibly be defrayed by the students' fees? In England, in America, and in Canada how much has been done by private effort. Surely a commencement might be made by an influential committee to organise the University, and to raise a sum which will enable the building to be commenced. A university for Birmingham, largely owing to the influence of Mr. Chamberlain, has been commenced in this way. It is a matter in which everyone in Queensland will take an interest, for no country or State can hold its own, and much less advance, unless education takes a foremost place. In England we feel severely the competition of America and Germany, and we are fully conscious of the fact that the progress made by our competitors has been the outcome of their complete system of education. We are now endeavouring to meet that competition by extending scientific and technical education and by founding new universities in London and the provinces. We hope to establish a system similar to that existing in Canada, which makes it possible for a really clever lad, whatever his position may be, to pass from an elementary school, step by step, to a university career, and thus attain the highest possible training in any branch of learning for which he may have shown a special aptitude. I feel convinced that Queensland will not be behind other States of the Commonwealth and other colonies of the Empire, and that if the University building is commenced those who have made fortunes in mining and commerce will follow the example of patriotic Canadians and Americans. With the aid of private munificence and the support of the State the Brisbane University would become a seat of learning worthy not only of Queensland but of the whole Commonwealth.

RESEARCH MUST BE CONTINUOUS.

With such a university we need no longer fear the fluctuations in the finances of the State. Scientific researches would continue to

be prosecuted within the walls of the University, and continuity in research is essential. Science is always extending her frontiers, and scientific work which is stopped in any one direction is like a mine which is temporarily closed down, except that a vein which was being followed by the prospector in science may be altogether missed by others, and his work be lost to the world. As an instance of the necessity for continuous work and the intricacy of scientific problems, and the need for modifying accepted opinions in the light of new discoveries, I propose to draw your attention to the subject of tuberculosis in relation to the public health.

HUMAN AND BOVINE TUBERCULOSIS.

I was asked to address you to-night more particularly upon some subject attracting attention in England. When I left there was no topic of conversation which was more fully discussed in scientific circles than the relation between human and bovine tuberculosis and the origin of human consumption. This subject was brought to the front last summer at the International Congress of Tuberculosis by the well-known discoverer of the tubercle bacillus, Dr. Robert Koch, and it is of so much importance that the Government has appointed another royal commission to reinvestigate it. Up to the time of Dr. Koch's discovery of the tubercle bacillus in 1882 it was a difficult matter to give an exact and comprehensive definition of tuberculosis. Dr. Koch's discovery simplified the teaching of pathology. He pointed out that whatever might be the clinical manifestations, or the appearance of a particular morbid growth, if the tubercle bacillus was present the disease was tuberculosis. The further discovery of bacilli with similar morphological, tinctorial, and cultural characters in tuberculosis of the lower animals, and the fact that human and bovine tuberculosis could both be readily inoculated in certain animals, led to the acceptance of the doctrine that tuberculosis was a disease common to man and the lower animals, and readily inter-communicable. Koch, in the first publication of his discovery, announced that tuberculosis of the domesticated animals, and especially bovine tuberculosis, was undoubtedly a source of human infection. This fact, he added, indicated the position which in the future hygiene must take in connection with the danger of the milk of tubercular animals. Bovine tuberculosis was identical with human tuberculosis, and was a disease transmissible to man. It was, therefore, to be treated like other infectious diseases transmissible from animals to human beings.

Though proofs of the absolute identity of the two diseases were undiscoverable, nevertheless Koch's statements were accepted and acted upon. The danger of consuming the flesh and milk of tubercular animals was insisted upon in England; prosecutions and heavy penalties followed for allowing meat to be sold when there was even only a trifling indication of the disease, and the flesh, to all appearance, perfectly healthy. Magistrates were very severe in carrying out what they believed to be measures for the protection of the public from a terrible disease, and honest and well-intentioned tradesmen, who had erred from ignorance rather than intention, were practically ruined. There was not only a crusade against the sale of flesh and milk from tubercular animals, but it was openly demanded that all animals suffering from tuberculosis should be compulsorily slaughtered, without even any attempt being made to face the question of compensation. There is no doubt that the result of this crusade was to inflict great hardships upon farmers and the meat trade, and in a great many cases grave injustice was committed. The discovery of tuberculin made the position still more impossible, for by its aid facts were brought to light which proved that tuberculosis existed in cattle to an extent which exceeded the wildest statements of the most ardent believer in the danger of infection of mankind from cattle. Lord Spencer's celebrated Jersey cattle were to all appearance in perfectly healthy condition, with the exception of two, in which there were suspicious symptoms. All reacted to the test of tuberculin, and were killed for examination. In every animal there were indications of tuberculosis. A still greater excitement was caused by the testing of Queen Victoria's cows at Windsor. Thirty-two gave a reaction, three were doubtful, and five were apparently healthy. When the animals were killed and examined thirty-six were found to be tubercular. Equally startling statistics were collected from other quarters. Of cattle tested in various parts of England and Scotland as many as 31 per cent. reacted. In London 25 per cent. of cattle slaughtered under the pleuro-pneumonia compulsory slaughter order were found to be tubercular, and in some herds as many as 30 to 40 per cent. It was estimated that about 20 per cent. of milch cows in towns in England were tubercular. In Germany the returns from the abattoirs were in many cases even higher. You are now in a position to realise the sensation caused by Dr. Koch, when he announced at the last Congress of Tuberculosis in London that human and bovine tuberculosis were, after all, not inter-communicable. This

statement upset the policy of the medical department of the Local Government Board. It paralysed the law, for it was quite impossible in the face of such a statement to obtain a conviction before magistrates; and it destroyed many arguments upon which the crusade was being instituted for the eradication of human tuberculosis. Many, however, hailed the announcement with unqualified satisfaction; for, if Dr. Koch's view were correct, then one of the channels of infection which was supposed to exist was eliminated, and an imaginary danger removed from our midst. In order to follow the controversy which ensued, I must refer to Dr. Koch's researches in some detail, so that I may be able to make clear the points at issue and compare his work and conclusions with the experiments and opinions of others who have investigated the subject. Dr. Koch's experiments were carried on for about two years with the co-operation of a very distinguished veterinarian, Professor Schutz, of Berlin. In various ways they inoculated 19 cattle with tuberculous virus from a human source, and none of the cattle developed any symptoms of disease. On the other hand, cattle inoculated with virus from a bovine source suffered, without a single exception, from the severest tubercular disorders of the internal organs. Dr. Koch was forced to the conclusion that human tuberculosis differed essentially from bovine, and he expressed the opinion that it could not be transmitted to cattle; and, further, that if man is susceptible to bovine tuberculosis, infection from this source must be extremely rare. He believed that the extent of infection by milk and meat of tubercular cattle (if it existed at all) was so trifling that he did not deem it advisable to take any measures against it. I entirely agree with Dr. Koch, that if infection of mankind occurs from cattle, it is extremely rare; but the statement that human tuberculosis cannot, under any circumstances, be transmitted to cattle is erroneous, and I feel very strongly that his statement with regard to the inadvisability of taking any preventive measures is calculated to do a great deal of harm. It creates the impression that dairymen and milk-sellers are justified in selling tubercular milk.

CALVES ARE SUSCEPTIBLE TO HUMAN TUBERCULOSIS.

I feel justified in so far disagreeing with Dr. Koch, because in an inquiry undertaken for the Board of Agriculture I had occasion to make the following experiment:—A perfectly healthy calf was inoculated intra-peritoneally with virulent human tuberculous sputum. So far from the result being negative, there was

extensive deposit at the seat of inoculation, with numerous tubercles extending from it. The inoculation produced concurrently blood poisoning, and death occurred 42 days afterwards. On microscopical examination minute tubercles were found throughout the lungs and liver, containing long and beaded bacilli of the human type. I did not extend the experiment in this direction, as I was deputed at once to make an exhaustive inquiry into another disease which is sometimes mistaken for tuberculosis. However, other investigators in England and America have since confirmed my results. Dr. Sidney Martin, on behalf of the royal commission on tuberculosis, also experimented on calves with tubercular sputum. Four calves were given sputum with food. One calf killed in four weeks had developed 53 nodules. The second, killed in eight weeks, showed 63; the third, killed in 12 weeks, showed 13; and in the fourth there were no nodules at all. The results, however, were somewhat puzzling. In calf three the nodules in the intestine contained tubercle bacilli, but they were totally absent in the microscopical specimens of the nodules produced in calves one and two. In another experiment two calves received tubercular sputum with their food. In one, killed in eight weeks, there were 13 nodules in the small intestine and mesenteric glands. In the second calf, killed in 19 weeks, the result was absolutely negative.

Dr. Ravenel, in the course of a very elaborate inquiry, made some experiments of an equally positive character. Four calves were, as in my original experiment, inoculated intra-peritoneally with tubercular sputum. In one case the result was negative. The other three were all infected, the lesions in two being extensive. On the other hand the results were uniformly negative when Dr. Ravenel mixed human tubercular sputum with the food. To sum up, the evidence is conclusive as to the possibility of grafting human tubercle in bovine tissues, but the experiments are not invariably successful. The results are, I think, to be explained in this way: Human and bovine tuberculosis are distinct varieties of the same disease. They are variations resulting from cultivation on different soils. Bearing this in mind, we would hardly expect that the attempts to transmit human tubercle to cattle would be always successful. Too much stress cannot be laid upon the necessity of realising the differences which exist in the nature of the soil upon which a virus is inoculated. This is very well illustrated in the inoculation of human small-pox upon cattle. Small-pox is essentially a disease peculiar to man. It has never been known to attack cattle, but the virus of small-pox can,

in exceptional cases, be cultivated on bovine tissues. The experiments are so difficult to carry out that many have failed, and have positively refused to believe in the successful results of others. Variolation of the cow is nevertheless a fact, and so marked is the effect of cultivating the small-pox virus upon a soil which is foreign to it, that the highly infectious disease in man becomes transformed in cattle into a mild disease which is not infectious. The effect of a foreign soil is also illustrated in the result of inoculating sheep-pox in man. This highly infectious disease of sheep, when grafted on human tissues, is also transformed into a mild non-infectious disorder.

We can take it for granted that in exceptional cases human tubercular virus can be experimentally grafted on cattle, and we have good reason to believe that in exceptional cases bovine bacilli may invade the human tissues. I refer to those rare cases in which there has been accidental inoculation. Veterinary surgeons, butchers, and others whose occupation brings them into contact with diseased cattle, do suffer from tubercular nodules in the skin, which contain tubercle bacilli, undergo caseation, and disappear. I am convinced that human infection with the bovine variety of tubercle can only be quite exceptional: if it were not so, the inhabitants of every country in the world in which bovine tuberculosis is prevalent would be decimated by tubercular disease. Tubercle bacilli occur with frequency in milk, cream, butter, cheese, and I have already given you some idea of the quantity of meat derived from animals with more or less tuberculosis.

TUBERCULOSIS IN CHILDREN.

I would next draw your attention to the theory that tuberculosis in children is necessarily due to infection from the milk of tubercular cows. Those who advocate this view appear to have entirely lost sight of the opportunities for inoculation from a human source. Tuberculosis of the digestive tract may result from swallowing sputum when there is concurrent disease of the lungs, and in many other ways. There are obviously many paths by which a child may be infected by the mouth with bacilli from a human source. A tubercular mother may take little or no precaution in nursing her children, and the habit of tasting food before giving it to an infant suggests a channel of infection. Various objects, contaminated by consumptive sputum, may find their way to the mouth of a child. London physicians, who have had enormous experience with patients suffering from consumption, of all ages, are by no means ready to accept the

milk theory. Sir Richard Douglas Powell, one of the most cautious and scientific of living physicians, in his evidence before the royal commission, stated that he had not met with any cases in his experience which would connect consumption in man with the use of milk and meat from tubercular animals. Dr. Goodhart, consulting physician to the Evelina Hospital for Children, was of the same opinion. I certainly am not prepared to attribute tuberculosis in children to a bovine origin, especially as the experiments of Nocard and others have shown that when the milk of the tubercular cow is mixed with the milk of healthy cows it is no longer virulent to experimental animals. In order to accept the theory that tuberculosis in children is due to cow's milk, we should have to believe that in every instance the milk supply had been obtained direct from the udder of a tuberculous animal without being mixed with the milk of other cows.

I consider, nevertheless, that milk from cows suffering from any diseased condition of the udder or teats is unwholesome, and I maintain that when we pay for pure milk we are entitled to have it. We want the doctrine of absolute cleanliness to reach our dairies, both public and private. On no account should any "waster" or "piner," or cow suffering from any disease affecting the milk, be admitted into the herd. Registration and inspection of dairies are of great importance, but with or without Government inspectors I think the public might to a great extent protect themselves. It would be a distinct advantage to adopt the Danish system of co-operation. In towns like Brisbane small dairymen should combine to form large model dairies. They should invite inspection of their premises and farms. They would find it to their own advantage to employ a veterinary inspector. The public would be willing to pay a higher price if they had a guarantee that the cows were healthy and that every precaution had been taken in the collection, in the transit, and in the delivery of the milk. A great deal has been said upon the necessity of boiling milk. Except in time of epidemics it is not a practice likely to be generally adopted. Pure fresh milk is an ideal food, and the boiling of milk alters its composition. It is then very unpalatable to many people, and is not only unsuitable, but in many cases dangerous, for infants. Neither Dr. Powell nor Dr. Goodhart were prepared to recommend the boiling of all milk. From their evidence we may gather that they had other causes of consumption in their minds. They insisted upon the fact that tuberculosis of the bowels is almost unknown in very young children, and it is not very

common even in children from five to ten years old. Dr. Goodhart laid great stress upon the fact that tuberculosis in children was very common when there was a distinct family history of tubercle, and it was quite common also to find children becoming tuberculous after measles, bronchial-pneumonia, whooping-cough, and intestinal catarrh.

I would draw attention to the fact that negro children in the West Indies suffer from tubercle, and they have very little milk, and this, owing to the tropical climate, is almost always boiled. Tuberculosis in children in England is largely a disease of the poor. Though it attacks all classes, it is extremely common among the London poor and in all our over-crowded towns. The disease among the poor is attributable more to the want of milk than to the possible occurrence of a few stray bacilli. Plenty of milk, good nourishing food, better hygienic surroundings, will with certainty diminish the number of tubercular children in England. As the slums are removed from our over-crowded cities, and when the problem of the better housing of the poor has been solved, we may confidently expect to see a steady diminution of consumption. In Brisbane and other growing towns in Queensland it should be the care of the Government, of municipal authorities, and the public that the insanitary conditions which we have inherited in the old country should never be allowed to arise.

FLESH OF TUBERCULOUS ANIMALS.

As regards any danger from consuming the flesh of animals with tuberculosis, I believe it is practically *nil*. There has not been a single case recorded of tuberculosis contracted by eating tuberculous meat. Jews have a very thorough system of meat inspection, and yet they are by no means free from tuberculosis. In the course of my travels in the West Indies I found that the negroes were very liable to consumption, and Dr. Williams, of Demerara, pointed out to the royal commission that the Hindoo coolies also suffered very severely. Yet Hindoos eat very little meat of any kind, and the negroes eat meat in very small quantities, and then it is beef or salt pork imported from America and well cooked before it is eaten. They, however, take very little care to protect themselves from chills, and they live for the most part in small and badly-ventilated buildings. We are justified in concluding that if the carcase is well nourished the meat is perfectly wholesome, in spite of the existence of local deposits of tubercle in the viscera and glands which should, of course, be condemned. The views of extremists cannot be carried into

effect. It is sometimes argued that though an animal may be in prime condition, if there is a single tuberculous nodule the carcase ought to be destroyed. In my opinion there would be no justification for the wholesale destruction of such valuable food. Compulsory destruction of every animal with the slightest indication of tuberculosis would ruin the farming industry. No Government would face the question of compensation for every case of tuberculosis, however slight the lesion. Such a course would involve the destruction of an enormous proportion of the cattle of the United Kingdom, and create a meat and milk famine. To secure perfectly healthy cows, thus saving much loss and ensuring the supply of pure and wholesome milk, will be a splendid work for veterinary surgeons and breeders of stock to undertake, and one to which they should direct all their energy. It can be confidently asserted that there can be no better recommendation of Queensland meat than a very high standard of health in Queensland cattle, and the percentage of tuberculosis in cattle in Queensland would appear to be extremely low. I find in the reports of the Board of Agriculture out of 21,768 cattle slaughtered the proportion of tubercle was 1.1 per cent.

In another report of 27,905 slaughtered, the percentage of tubercle was .9 per cent. But as I have already pointed out, it is difficult to arrive at a correct estimate from the published returns.

SO-CALLED "CANCER" IN CATTLE.

It is absolutely necessary to differentiate in every instance the disease known as actinomycosis. I have already referred to the use of the word "cancer" in the reports of the meat inspectors. I regret to find that this popular term is still made use of. Probably those who use it little realise how damaging it is to the meat industry of the State. Last year there was a correspondence in the *Times* in which it was suggested that the increase of cancer in England was due to eating the flesh of cancerous animals imported from the colonies. I took an early opportunity of pointing out the absurdity of suggesting any connection between so-called cancer in cattle and cancer in the human subject. Many years ago I published an exhaustive report upon actinomycosis, which is prevalent in England. I pointed out that various manifestations of this disease were known to farmers and breeders as "cancer of the tongue," "cancer of the jaw," "cancerous polypus," "osteosarcoma," and various other misleading names. Every one of the cases which came under my observation was shown to be a manifestation of actinomycosis,

local inflammatory affection associated with the presence of a characteristic fungus known as the *streptothrix actinomyces*. The disease has no relation whatever to cancer in the human subject. It is this disease which is met with in Queensland, and it is most unfortunate that the public should be alarmed by any reference to cancer. I trust that in all future reports of the meat inspectors that the popular term "cancer" will be left out altogether, and that the scientific name for every disease will be given. Actinomycosis, though common in cattle, occurs also, though rarely, in man, and, as in the case of tuberculosis, it has been suggested that the disease is derived from cattle. It is, in my opinion, a distinct variety. I do not accept the theory that men and animals infect each other with actinomycosis, but I believe that they contract the disease quite independently, and that the micro-organism is derived from some source in common. And, further, the flesh in these cases is perfectly wholesome, and only the tongue, or other part affected, need be destroyed.

PSEUDO-TUBERCLE BACILLI.

We have not only to distinguish actinomycosis from tuberculosis, but we must in future pay close attention to distinguishing the tubercle bacillus from some recently discovered and closely allied bacilli. There is no doubt that the reports of the discovery of tubercle bacilli to an alarming extent in milk and milk products, and in the dust of rooms inhabited by consumptive patients, will have to be modified. After the first discovery of the tubercle bacillus, all rod-like organisms with the same tinctorial characters were pronounced to be tubercle bacilli, with the exception of the leprosy bacillus and a bacillus found in certain secretions. Further investigation of some of these bacilli have given very striking results. The first discoveries in this direction were made by Petri and Rabinowitch, who succeeded in showing that there was a bacillus in butter with all the general characteristics of the tubercle bacillus, and further, the inoculation of this bacillus in guinea pigs produced lesions, which to the naked eye and under the microscope were very easily mistaken for tuberculosis. Korn and others have described other forms in butter and milk not materially differing from one another, and Moeller regards them as varieties of the so-called grass bacillus obtained from grasses and dust. The latter was first obtained from Timothy grass, and is known as the Timothy bacillus. It cannot possibly be distinguished microscopically from the tubercle bacillus. It is granular, and exhibits branching and club-like swellings; it stains exactly like the tubercle

bacillus; and the cultures, though differing at first, after passage through animals strongly resemble those of tubercle. In guinea pigs the lesions are similar to those set up by the butter bacillus, and in rabbits they are very difficult to distinguish from true tubercle, owing to the formation of giant cells and epithelioid cells and caseation. Another grass bacillus is similar in staining reactions to the tubercle bacillus, but it is rather thicker and has a special tendency to form threads. It produces in guinea pigs lesions similar to those caused by the butter bacillus. Another pseudo-tubercle bacillus has been isolated from manure and from the excrement of cows and other herbivora. Other bacilli of this class have been found by Fraenkel and Pappenheim in pulmonary gangrene and other morbid conditions of the lungs, and by Moeller in nasal and pharyngeal mucus.

PREVENTION OF CONSUMPTION.

With regard to the prevention of consumption, this must be left principally to the sanitary inspector and the medical officer of health. We must not concentrate all our energies upon the destruction of tubercular sputum, but give much more attention to those insanitary conditions which are responsible for the causation of tuberculosis. This is a matter which in Brisbane can be safely left in the hands of the energetic Commissioner of Health. Dr. Ham has before him a career of great usefulness in this city; but if he were to do nothing more than what he has already achieved he would deserve to be remembered with gratitude by the public of Brisbane. I refer more particularly to the institution of a Queensland branch of the London Sanitary Institute—the recognised authority for granting certificates qualifying persons as sanitary inspectors. This will have a far-reaching effect in obtaining and maintaining a high state of sanitation in this town. I regard the trained sanitary inspector as the most formidable opponent of diseases such as diphtheria, typhoid, cholera, plague, and yellow fever, which flourish wherever insanitary conditions prevail. If only sanitary inspectors could, without let or hindrance, carry out their duties under the direction of one central authority, we should soon hear of a reduced death-rate and far greater immunity from epidemic diseases. The work of sanitary inspectors is one which ought to be more fully appreciated by the public, and, instead of hindrances, facilities should be put in their way when carrying out duties which involve the general health of the community and the saving of many human lives.

As regards the relation between tuberculosis and insanitary conditions, we have some

evidence forthcoming from the study of the disease in animals. Tuberculosis, for instance, is peculiarly liable to occur among birds and animals kept in captivity; poultry and guinea-fowls, and ostriches and emus and other birds in zoological gardens, develop tuberculosis; monkeys in captivity, pheasants in preserves, and rabbits in overcrowded warrens sometimes die in great numbers. These examples point to the conclusion that confinement, overcrowding, defective ventilation, heredity, and breeding in and in are powerful factors in rendering the tissues prone to tubercle and a fitting soil for the invasion of the bacilli. We must also remember the danger of damp houses and the effect of a cold and foggy climate. In addition to general insanitary conditions, I desire to draw particular attention to the influence of alcoholism. This was brought most forcibly before the London Congress in an exhaustive paper by Dr. Brouardel. The influence of previous diseases has been urged by Dr. Goodhart; and special trade occupations which involve inhalation of dust of various kinds must not be overlooked. I trust that much weight will be given to these matters by the Queensland Society for the prevention of consumption.

HEREDITY.

I should like to say a few words on the subject of heredity. Heredity is of two kinds. There is hereditary pre-disposition and hereditary transmission. Inherited susceptibility renders many liable to the development of tuberculous disease. Family history plays a very important part in tuberculosis. Sir Richard Powell stated to the commission that, in his experience, 48 per cent. of the cases in hospital suffering from tuberculosis had a previous history of hereditary tuberculosis. Dr. Klein and Mr. Victor Horsley are convinced that there is direct transmission of the virus of tubercle in some cases, and that it may exist for many years in a latent form. In connection with the question of heredity, some interesting observations have been recorded upon tuberculosis in birds. According to Dr. Baumgarten, a male bird on a poultry farm developed tuberculosis. All the chickens reared from this parent were tubercular. There was no evidence of infection with either human or bovine tubercle. An identical case occurred on another farm, and these instances have been quoted in support of the theory of direct transmission of the virus from the parent. Tuberculosis is not a common disease in calves, and it seems probable that those cases which do occur are mostly, if not entirely, the result of hereditary transmission.

CONSUMPTION NOT INFECTIOUS BUT INOCULABLE.

In conclusion, I would like to draw attention to the theory upon which so much stress has of late been laid, viz., that consumption is *infectious*. I feel very strongly that this is most misleading, and I think we ought to do all we can to allay the public anxiety which has arisen from the belief that consumption can be caught like scarlet fever. To compare it also to typhoid fever is a great mistake. In typhoid epidemics at home, in India, and recently in South Africa, we know that those in health and out of health fell victims to the disease when they took the poison in food or water. Tuberculosis is not infectious, but it is an inoculable disease. In the Brompton Hospital, in London, it has been found that among nurses, porters, physicians, surgeons, in fact among all those who have been in connection with it, the mortality from consumption is within the average of ordinary mortality. If tuberculosis were an infectious disease, and readily conveyed from person to person, the marriage of individuals who become, or are consumptive, would be a fruitful source of direct infection. We should hear constantly of instances in which married people had infected each other with tuberculosis. There is a great difference between natural infection and experimental inoculation, and to this we should attach the greatest importance.

It cannot be too widely known how virulent is the sputum of consumptive patients when inoculated in susceptible animals, and the habit of spitting in public places, and railway carriages, and other conveyances, should be prohibited. It is a disgusting habit, but there is no need to create a panic or raise an outcry for legislation, making spitting in public places a matter to be dealt with in the police court. The sputum of consumptive persons should be disinfected. A good deal of attention has been drawn to the danger of sputum when dried and raised in dust. The virulence is greater when the sputum is moist, and when it has not been exposed to sunlight. That the virus of tubercle is scattered far and wide, and is a danger to all, is not a theory which is supported by experiment or experience. For example, sputum dried and disinfected by the powerful action of the Australian sun, will be rendered inert. Dr. Ransom maintains that in a well-ventilated room sputum is harmless. Tuberculous sputum kept in the ventilating shaft of a hospital proved virulent to rodents, but similar sputum in a well-ventilated and well-lighted room became absolutely harmless. It is no doubt owing to this exaggerated idea of infection that there have been such extreme proposals as the New Zealand Act excluding tubercular immigrants. It is probably due to the same cause that the

is some prejudice in Queensland against the building of sanatoria for consumptives. There is not a shadow of foundation for the theory that there is danger to the inhabitants of a township if a sanatorium is erected in the neighbourhood. I trust there will be no opposition to erecting sanatoria for the poor and for paying patients. Bright sunshine, invigorating air and cheerful surroundings are conditions which compensate in some measure for separation from family and friends, alleviate the sufferings, and give hope in many cases of permanent recovery.

CONCLUSION.

In the remarks I have made to-night I have touched upon many controversial points, and I have endeavoured to indicate the lines upon which further research is required. I trust that those engaged in scientific inquiries in Queensland will help to throw light on these points. The report of the new Royal Commission now sitting in London will be awaited with interest, but in the meantime there is no uncertainty as to the course to be adopted by those responsible for the public health. Whatever the result of that inquiry may be as regards the relation of bovine to human tuberculosis, we know that there are many factors in the production of this disease.

The removal of insanitary conditions by the co-operation of the public with sanitary officials will secure for Brisbane the enviable position of being conspicuous among all the great cities of the Commonwealth, on account of its low death rate and practical immunity from all epidemic diseases.

THE WIDAL REACTION.

ITS PRACTICAL WORKING AT SYDNEY HOSPITAL.

BY

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ONE of the most common beliefs about the widal reaction is that if the result is not "positive" it must be undoubtedly "negative." Now this is far from being the case. There are a certain number of reactions which are on the borderland between the two, and it is with these that judgment and great experience of the reaction are necessary. For instance, after the lapse of, say, 50 or 60 minutes, there may be a few small clumps

present. These will hardly be sufficient on which to call it a positive reaction, yet we have no doubt that, provided the culture be good, these clumps have some significance. They may be interpreted in one of two ways—(a) either that the patient is in the early days of an attack of typhoid, or (b) that he has had typhoid previously, some of the anti-toxin which he then formed remaining in his blood and exerting a feeble clumping action. In a few cases patients suffering with chronic diseases have given this very feeble clumping reaction, and we have not been able to definitely trace a past history of typhoid, but as frequently the disease is mild and goes by other names, the question is by no means settled by the patient's statement. Our grounds for saying that even slight clumping has some significance is that we have watched the action of blood of numberless diseases on the typhoid bacilli, and, with the exception of a few cases noted elsewhere, there has been no sign of clumping after an hour or more.

It is impossible to write down what extent of clumping constitutes "positive;" different observers might look at the same reaction (provided it is not marked) and yet have different views as to the result. As a rule, in our experience, the bacilli, if they are going to clump, will at least *commence* to do so within twenty minutes; in those cases where they do not, the clumping, if it does appear later on, is never very marked and not of great diagnostic value. It is not necessary for all the bacilli to be clumped; even in marked reactions it is common to see some free and actively mobile. Preceding the clumping there is always a diminution of motility, but too much stress should not be laid on this alone, as *without* the addition of blood the bacilli tend to become much slower in their movements after ten minutes or so. The intensity of the reaction is not always in accordance with the severity of the disease.

Day of the disease on which the reaction appears. This is impossible to fix, since it varies so much. This we can say, however, that it is not usually present in the first week. We frequently get it about the eighth day, but never well marked till at least a few days later. The longer the patient has been ill the more marked the reaction, and it is not at all uncommon for the clumping to have taken place before it can be examined under the microscope. On the other hand, there are a few cases of typhoid which fail to give it throughout their course, but show it during the relapse. This has happened in several cases, and makes one wonder whether the relapse is in any way due to the deficiency of the anti-toxin in the blood. Unfortunately

for this theory, however, other cases give the reaction during their course and also have a relapse.

TECHNIQUE.

In those cases that date back several years a bouillon culture of typhoid was used, employing nine drops of this to one of blood (a dilution of 1 in 10); 30 minutes were given within which the bacilli must have clumped, otherwise the reaction was written down as "negative." Later on the bouillon culture was given up, and agar substituted. The dilution was also weakened and the time limit extended. The method then was as follows:—To take 19 drops of sterilized bouillon, just touch the agar typhoid culture with the edge of the platinum loop, mix this with the bouillon on the cover slip held by forceps, and add one drop of the blood (great care should be taken not to remove too thick a smear from the culture, otherwise the reaction will be spoilt). This method has been adhered to ever since. The advantages it possesses are (1) the motility of the organisms is better; (2) that we get no pre-formed clumps as occasionally happens in bouillon.

The Agar culture is at its best when between 12 and 18 hours old. If the reaction of the Agar is not correct, viz., faintly alkaline, then the culture will suffer, and without an actively

motile culture the test should not be performed. We have made several errors through disregarding this rule, for the blood of typhoid patients may fail to clump sluggish bacilli. The more actively motile the bacilli, the more satisfactory the test. In any case where we are not satisfied as to the condition of our culture, we should control the test by contrasting it with the blood of a healthy person. After the typhoid growth has been sub-cultured a number of times, it tends to become feeble; the best plan then is to re-inoculate from a stock culture. The most vigorous cultures are those got from a typhoid spleen.

We have found the lobe of the ear the most suitable place for securing the blood. If it is made hyperæmic by vigorously wiping with dry wool, then one smart stab with a hare-lip pin will secure without pain as much blood as is needed; even more, for only a few drops are required. We generally collect it in a sterilized glass tube which has previously been used for B.W. peptonising powder. If it is allowed to stand for a few minutes the blood will clot; this may be separated from the glass by the platinum loop, thus allowing the serum to become free; for it is a drop of the serum mixed with a few blood corpuscles that we require. The only reason for sterilizing the glass tube is in case of the blood not being tested for some

DISEASES OTHER THAN TYPHOID WHICH GAVE A POSITIVE REACTION.

Disease.	Intensity of Reaction.	Remarks.
FERRICULA	—	Past history not inquired into.
APPENDICITIS	Feeble	Patient gave a history of several previous attacks of what were said to be the same as his present illness. One of these lasted 11 or 12 weeks. Surely more like typhoid than appendicitis.
PUERPERAL PYEMIA	Fairly marked	Absolutely no history of typhoid to be obtained.
MYELOID SARCOMA OF FEMUR ..	Feeble	Never ill before in her life.
EMPYEMA	Feeble	Past history not inquired into.
SEPTIC ENDOMETRITIS	Marked	Beyond slight illness for a week (chiefly headache) several years ago, no previous trouble. Tested on two occasions, with an interval of a week. Reaction not more marked the second time.
GANGRENOUS APPENDICITIS AND PERITONITIS	Marked	No past history of typhoid. The appendiceal pus was not examined bacteriologically.
LATERAL SINUS PYÆMIA	Marked	Tested on three or four different occasions with the same result every time. Not noted whether the reaction became more marked as the disease progressed. No typhoid bacilli found in the pus.
CEREBRAL ABSCESS	Feeble	Large sub-dural abscess. All the sinuses filled with pus. No past history of typhoid.
MYXEDEMA	Feeble	Past history not inquired into.
MEASLES	Feeble	Past history not inquired into.
SARCOMA OF PITUITARY BODY ..	Feeble	Past history not inquired into.

days, in which case, if this precaution has been neglected, there will be a growth of organisms which go into clumps of their own accord and may be confused with the typhoid bacilli when doing the reaction.

TYPHOIDS THAT GAVE A POSITIVE RESULT.

Two hundred cases of typhoid were tested, and gave a positive reaction, a few, however, not until the second or third week, and several not until they had a relapse.

POSSIBLE CASES OF TYPHOID WHICH GAVE A
NEGATIVE REACTION.

1. A child of nine years. Ill one week before admission; while in hospital temperature not higher than 100·4 deg., reached normal five days after admission. Attack commenced with vomiting, purging, and headache, and loss of appetite. Thus the whole course of the illness was not more than two weeks. Surely a doubtful case. Blood tested on two occasions.

2. Female, *et.* 33. Ill 14 days prior to admission; illness began with vomiting and loss of appetite. No headache. Temperature on admission, 103·4 deg., fell gradually and reached normal five days later. While the temperature was up, the pulse was frequently above 100. Chest clear, abdomen slightly distended. Blood tested on the 19th day of the illness and only once.

3. Male adult. Blood tested on the 7th day of his illness and not again.

4. Male, *et.* 21. Took ill about May 19th, with weakness, malaise, and anorexia. Temperature when admitted on May 29th was 101 deg., never went above 102·2; reached normal on June 3rd. Spots on chest and abdomen.

These few cases do not fully represent the situation, for, as noted above, some patients with enteric failed to react until the second or third week.

Looking at the table on page 297 it will be seen that twelve cases gave a positive reaction, varying in intensity, but if the past history of the patient had been carefully inquired into in many of them, then we have no doubt that the number would have been reduced. In four of them which gave a marked reaction (that is to say, clumped decisively within fifteen minutes) there was absolutely no history of typhoid. These were most conspicuous failures. The rest of the series only reacted feebly, yet still on the strength of them typhoid in its first two weeks might well have been diagnosed.

On the whole, however, the number of failures (comparative and complete) is small considering the number of cases tested. Personally, we think that these failures will be cleared up some day.

DISEASES WHICH GAVE A NEGATIVE REACTION.

	Cases.
Meningitis (all forms)	13
Influenza	12
Appendicitis (catarrhal, suppurative and gangrenous)	16
Pneumonia (lobar and broncho) ..	38
Febricula	17
Enteritis	8
Pleurisy (dry and serous)	7
Gastro enteritis	2

	Cases.
Tuberculosis of lungs	8
Acute miliary tuberculosis	13
Nephritis	6
Nephritis with uræmia	2
Pyelitis	1
Rheumatism	6
Chorea	1
Empyema	3
Salpingitis	3
Constipation	2
Bronchitis	2
Valvular heart disease	3
Gall stones	3
Gastritis	3
Abscess of the liver	2
Abscess	2
Acute lead poisoning with uræmia ..	1
Malignant endocarditis	2
Malaria	5
Septic peritonitis	8
Lymphadenoma	2
Diphtheria	2
Pyæmia (including a lateral sinus and two puerperal cases)	5
Aneurism	2
Mastoid abscess	3
Ovarian cyst	2
Measles	3
Suppuration of antra of Highmore ..	3
Tonsillitis	4
Peri-hepatitis	2
Septicæmia	6
Syphilis	2
Cerebral softening	2
Carcinoma	5
Colitis	2
Acute infective osteo myelitis	2
Acute infective periostitis	2
Hydatid	3
Plague	2
Secondary anæmia	2

and one case each of gastric ulcer, duodenal ulcer, renal calculus, general paralysis of the insane, gangrene of the lung, exophthalmic goitre, lymphangitis, adenitis, cerebral hæmorrhage, orchitis, ulcer of the leg, chronic lead poisoning, scurvy, pernicious anæmia, chlorosis, beri beri, acute arsenical poisoning, fracture of the leg, tubercular peritonitis, hæmorrhagic pancreatitis, endometritis, pyo-salpinx, cholecystitis, whooping-cough, dementia, ischio-rectal abscess, peri-metritis, kerosene poisoning, acute dysentery, sarcoma, progressive muscular atrophy, ectopic gestation, gonorrhoeal synovitis, phlebitis, gonorrhoea.

Included in the above list are several cases of jaundice; this, according to some observers, gives a positive reaction. The total number is 280.

It is well to remember that in the wards of this hospital the widal reaction has commanded great respect, so that occasionally cases that clinically resemble typhoid, and might elsewhere be treated as such, but which fail to give positive reactions, are signed up under other headings, such as febricula, enteritis, etc. Most of the cases called febricula were, however, mild cases of pyrexia without any outstanding cause.

PERSISTENCE OF THE REACTION.

Perhaps the most unfortunate part about the reaction is the fact that in many cases it may still be got (less markedly, of course) years after. In one case the patient still reacted 12 years after his attack, and a lesser number of years is comparatively common. That this is not so in all cases is illustrated by one patient who failed to react 50 days after his temperature had reached normal.

The persistence of the reaction does not appear to depend on the severity of the attack.

To distinguish a reaction that is due to a past attack of typhoid in a patient suffering from an acute disease simulating typhoid, we require to do a second test, five or seven days later, and note whether it is more marked than on the former occasion; if so, the current disease is almost certainly typhoid.

POST-TYPHOID WIDALS.

No.	Positive.	No.	Negative.
1.	Enteric 11 years ago	1.	Enteric 2 years ago
2.	" several yrs. ago	2.	" 10 " "
3.	" 7 years ago	3.	" 30 " "
4.	" 4 " "	4.	" 3 " "
5.	" 10 " "	5.	" 3 " "
6.	" 3 " "	6.	50 days after
7.	" 5 " "		
8.	" 10 " "		
9.	" 10 " "		
10.	" 2 " "		
11.	" 9 months ago		
12.	" 6 years ago		
13.	" 12 " "		
14.	" 2 " "		
15.	" 1 " "		
16.	" 1 " "		
17.	" 4 " "		

The Manchester Unity Oddfellows have carried a resolution instructing their delegates to the Friendly Societies' Association to support any movement having for its object the removal from representation of any society whose semi-political objects are considered inimical to the best interests of *bona fide* friendly societies.

At a meeting of the Board of Public Health, Melbourne, on June 10, a resolution was moved by Mr. Wood that, to cope with the great destruction of infantile life throughout the State, the establishment of a founding hospital should be recommended. Dr. Gresswell said that he was collecting information on the subject, and had not yet completed inquiries.

THE PATHOLOGICAL CONDITIONS OF THE CRANIAL SINUSES.

By T. S. Kirkland, M.D., F.R.C.S., Edin., Senior Assistant Surgeon Ear and Throat Department, Sydney Hospital.

(Read before the Sixth Intercolonial Medical Congress, 1902.)

I WISH to present to this section of the Congress the results of an investigation into the condition of the various Cranial Sinuses found post-mortem, and to analyse the relationship between the disease producing the fatal issue and the pathological state of their interior.

With this object, I solicited the help of Dr. Stacy, assistant pathologist to the Sydney Hospital. He examined 100 cases in all, noting the contents, and in some cases adding the bacteriological finding.

The cavities examined included the antra of Highmore, the frontal, ethmoidal and sphenoidal sinuses, together with the lateral sinuses, middle ear, mastoid antrum and cells.

At the outset I fully expected the results to agree with those found by other investigators in the old world. I was astonished to find a considerable variance, more especially relating to the ethmoidal and sphenoidal sinuses. So far as I am aware, this is the first time that such an examination has been conducted in the Southern Hemisphere. It therefore adds a further interest to the question, in as much as the element of climate can be included when we compare the results with those found in the Northern Hemisphere. The examinations cover a period of one year. During four months of that time an epidemic of influenza occurred, followed in a number of cases by a fatal form of pneumonia. This largely increased the mortality for that disease as compared with former years. Pneumonia accounts for 22 out of 100 deaths when we include the two forms of the disease, and in no less than 11 cases were one or other of the sinuses involved, viz., 50 per cent. The sphenoidal sinuses contained pus in eight of those cases, and in three cases clear fluid, so that we have here 50 per cent. of the cases dying of pneumonia implicating the sphenoidal sinus. This bears a relationship of about 23 per cent. to the total number of pus infected cases. Of the whole number of cases dying of various diseases, 35 were found to contain pus in one or other cavities, i.e., 35 per cent. of the total number of cases contained pus. If we deduct the 22 cases which died from pneumonia, we have left only 13 cases whose cavities represent the result of a suppurative process.

The percentage of cases occurring in pneumonia was 45 per cent. We are thus justified

in assuming that the pneumococcus and its associates are actively instrumental in producing disease of the accessory cavities of the nose. The proportion of cases is very large, and justifies the inclusion of suppuration of the tributary cavities of the nose as one of the complications of the disease. Pneumonia is a disease affecting the respiratory apparatus, and as these sinuses are practically invaginations of the first part of the respiratory area, we need not wonder at their participation in the same morbid process. They are air laden, and present to the pneumococcus the same conditions for the manifestation of its activity as the air cells themselves. How far suppuration in these cavities contributed to the fatal result, or whether they exercised any effect in this direction, is beyond the scope of this paper; suffice it to say that we should occasionally meet with disease in these sinuses in patients who have recovered from this disease; not, however, in the same proportion as those found post-mortem, as many will have recovered, especially those who have had it for the first time. No doubt the number occurring in hospital patients will be larger than among private patients, due to the better surroundings of the latter.

Lennox Browne refers to this subject in the following way:—"Acute sinusitis has been mentioned as a complication of pneumonia, but it is more probable that a pneumonia, as also a laryngitis or tracheo-bronchitis, is in such circumstances a consequence and not a cause of the nasal and nasal accessory inflammation. It is, in fact, an example of a head cold descending to the chest, which is recognised by popular traditions as an omen of gravity. Another reason for believing that the sequence of events is as I suggest is that the rhinal discharge is the first to disappear, and that relief of the laryngeal tracheo-bronchial and pulmonary symptoms promptly follow suit, and in the order named. The pulmonary trouble may be produced in three ways:—(1) By simple continuity of surface; (2) by surface chill of the body in the depressed condition characteristic of an acute nasal catarrh, wherein the patient is liable to somewhat profuse perspiration of the head and trunk; (3) if a bacterial origin be advanced as essential by simple conveyance of bacteria through the respiratory passages, and the setting up of infectious foci in the lower respiratory tract and tissues."

Fränkel is strongly of opinion that the pulmonary mischief is primary, and he speaks of a pneumonic form of antral suppuration due to the diplococcus lanceolatus which he has found not only in the antral, but also in the frontal and ethmoidal sinuses. Personally, I can hardly believe that the order of events is

as Lennox Browne puts it, because pneumonia is frequently met with without any preceding head cold. We know that its invasion is usually sudden and not gradual, although it cannot be denied that a fair proportion of the cases succeed a cold in the head which may have lasted from a few days, or even longer, before the inception of the pneumonia.

Hitherto influenza has been regarded as the chief causative factor of sinus suppuration, to which has been added some of the infectious fevers, such as scarlet fever, typhoid, smallpox and measles. Hajek states in his "*Nebenhohlen der Nase*" that the pneumococcus is present in the antrum of Highmore in conditions of health; that being so, it is easy to see how it can be called into activity.

If I may be allowed to digress here from the strict title of my paper in discussing the etiology of these cases I should like to include the clinical aspect of some cases which have come under my own notice, with the view of raising the question of whether they are ever the primary factor in producing disease of the lungs. I have assumed that those cases found post-mortem were acute; however, some must have been more or less chronic in their nature, as shown by the existence of polypoid tissue as part of their contents. If they exist before the pneumonia, do they contribute either as an exciting or predisposing factor in the production of the pneumonia? Of this I am sure at any rate, that suppurating disease of the upper respiratory tract is now and again the cause of serious disease of the lungs. One case impressed itself upon me four years ago, in which a lady patient of mine, aged 32, suffered from a suppurating sinus of the right tonsil. With her finger she was able to express sometimes half a teaspoonful of the pus from the tonsil. She deferred treatment for a time, became ill with pneumonia, which was complicated with peritonitis, albumen in the urine, and pain in the humerus, which latter was in all probability due to a septic osteo-myelitis, and succumbed in the course of a week.

Some of you may have encountered cases in which the predominant symptoms pointed to bronchitis or bronchiectasis, and where the patients were treated with expectorants for years without benefit.

Three cases of this nature occur to me. The first was a young man, aged 28, who applied to me at the Sydney Hospital on account of obstruction of the nose, due to polypi. His frontal sinuses and antra of Highmore contained pus, and after these were cured he still continued to expectorate about two ounces of pus daily, which was subsequently found to be due to bronchiectasis. I have no doubt that

in this case the sequence of events was extension downwards of the morbid process from the diseased sinuses. The next two cases had unavailingly been treated for bronchitis, and were regarded as incurable. This is a disease which I regard as a *rara avis*, and which is difficult to conceive of existing in the balmy climate of Sydney, unless as a sequence of some suppurating process higher up. These cases both showed rapid improvement after the antra had been opened and irrigated. The cough in these cases is quite characteristic, and when once heard is easily recognised again. It is loose, and requires no effort to unburden the bronchi of their contents.

Friedrich's excellent manual on "Rhinology, Laryngology and Otology in General Medicine," page 28, says:—"That diseases of the lungs may owe their origin to direct extension of the disease of the upper air passages to the trachea and bronchi. Chronic bronchitis is the most frequent of the various sequelæ, and proves very obstinate, especially in cases of chronic suppuration in the tributary cavities of the nose, where the pus trickles down from the naso-pharynx into the deep air passages, and sets up a chronic irritation. The question of the relation between chronic catarrh of the upper and the deep air passages has not received the attention it deserves. It is barely mentioned in the most general terms in connection with bronchitis, and the possibility of emphysema, bronchiectasis or fetid bronchitis being due to such causes is usually ignored."

To further illustrate this subject I may cite two cases of gangrene of the lung, which you will find included in the post-mortems, and in which the ethmoidal and sphenoidal sinuses were peculiarly involved, as they contained dark coloured fluid, foul smelling, together with a profound alteration in the lining membrane, the colour indicating necrosis. It is open to question whether this followed, preceded, or occurred simultaneously with the lung affection. It evidently partook of the same character as regards odour as the gangrene itself.

The fluid furnished a variety of germs, viz., streptococci, staphylococci and diplococci resembling pneumococci.

Twenty-three cases of the total number contained pus in one or several cavities, while 18 cases contained fluid other than pus. Polypoid tissue was found in the ethmoidal and sphenoidal sinuses in two or three cases, and in one case the frontal sinus contained a polypus. We know from histology that apart from the antrum the mucous membrane lining the sinuses is almost devoid of glands, and yet in several cases a viscid gelatinous fluid was present.

This could hardly be regarded as the result of a catarrhal process. The number of cases containing watery fluid is instructive as showing that catarrhal processes in the sinuses are less rare than was at one time imagined. I opened the antra in a case of atrophic rhinitis; pus was found on one side and a clear watery fluid on the other without any cyst wall. Anderson, in the *Lancet* of 1892, page 474, mentions a case of nasal hydrops with the symptoms which we generally regard as due to the escape of cerebro-spinal fluid, and which was caused by a polypus in the antrum.

In Härke's cases quoted in Grünwald's "Nasal Suppuration," of 37 autopsies on people dying of typhoid, pneumonia, influenza, erysipelas, and meningitis, suppuration was found no less than 32 times, 31 times in the accessory cavities. This, of course, is a much larger proportion than has been found in these cases, possibly the result of climatic influence.

The sphenoidal cavities were involved in not less than 29 cases, 19 of which contained pus. When we consider the infrequency of the diagnosis of sphenoidal suppuration, it is evident that a large proportion escape recognition at the hands of the specialist. I feel disposed to think that frequently the condition recognised as Tornwald's disease is merely a clinical simulation, and that the real disease is in the sphenoidal sinus, and the pus we see in the region of the bursa of Tornwald is merely the pus which has trickled down from above and obtained for a time a resting place there. This supposition is strengthened when we reflect on the results attending our efforts at cure.

How frequently do we fail in the local application of treatment to the bursa by means of caustics and antiseptics to cure or even modify the condition. By the way, there is a condition sometimes seen after the removal of an adenoid somewhat resembling Tornwald's disease, and evidently caused by the removal of the growth; as in the cases I have seen there was no morbid secretion present prior to its removal. This may possibly be due to infection of the sphenoidal sinus.

Dr. Stewart mentions in the *Lancet*, February 19th, 1892, that suppuration of the frontal and sphenoidal sinuses was very rare. Such a statement is not supported by the findings in this series of post mortems.

Next in numerical importance comes the ethmoidal sinuses; they are involved in 13 cases, eight containing pus and the others variously coloured fluid. Polypoid tissue was found in one or two cases.

Rosenberg says the age in sphenoidal diseases ranges from 19 to 35. In these cases it ranges from 3 to 75.

Very little remains to be said of the frontal sinuses, as they were only eight times concerned in a departure from the normal state. Price Brown regards this as belonging to the domain of the oculist. The cases which find their way thither are the closed empyema, and even these should undoubtedly be placed under the care of the throat specialist, as they require treatment demanding intranasal interference.

Only four cases of suppuration were found in the antrum, this paucity being due to the fact that a number of the earlier cases were left unopened. All the other sinuses were systematically opened in all the cases.

BACTERIOLOGY OF THE SINUSES, BY H. SKIPTON STACY, M.D., CH.M. (SYD.).

This is very far from being exact, the chief reason being that cultures made from the contents of the sinuses are almost invariably overgrown, partly by saprophytic organisms, and partly by other organisms which grow more luxuriantly than the more important ones we are seeking. Bacilli of the *Proteo* group (saprophytic) give most trouble in this respect. In films made direct from the contents of the sinuses we frequently have difficulty in distinguishing pneumococci from staphylococci which have assumed a diplococcal arrangement. In one or two cases the pus from a sinus of a patient affected with tubercular disease of the lungs, &c., was examined for tubercle bacilli with a negative result; this does not prove that the sinus disease was not tubercular, as we frequently fail to find them in phthisical sputum until the second or third examination. Putting aside the non-infective diseases such as nephritis, chronic valvular disease of the heart, traumatic injuries, &c., we have left about 64 cases due to infection by micro-organism; some acute, some chronic in their course; some infecting one or two organs only, others the whole body (becoming generalised through the blood stream); of these 64 cases, 34 showed some affection of the sinuses, whilst 30 did not. Of the 34, however, in many cases only a few of the sinuses were affected, and, in some at least, the conditions were probably not due to the current disease, but to a previous one.

<i>Sphenoidal.</i>	Pus	19
"	Clear fluid	9
"	Bile-coloured viscid fluid	1
<i>Frontal.</i>	Pus	4
"	Clear fluid	2
"	Blood-stained fluid	1
"	Blood-coloured polypus	1
<i>Antra of Highmore.</i>	—	4
"	Brown fluid	1

<i>Ethmoidal Sinuses.</i>	Pus	8
"	Bile-coloured viscid fluid	2
"	Blood-stained fluid	1
"	Thin dark blood	1
"	Clear fluid	1
Total number of cases suppuration of the accessory cavities		35
Total number of cases with fluid other than pus in the sinuses		20

Sex.	Age.	Disease.	Sinuses Involved.
M.	41	Pneumonia	Sphenoidal contained pus; all others healthy.
M.	52	Malignant of bowel	All sinuses healthy.
F.	69	Meningitis	All healthy.
F.	21	Cerebro spinal meningitis	All healthy.
M.	44	Lobar pneumonia	R. frontal sinus thin yellowish pus; pus contained pneumocci.
M.	26	Chronic phthisis	All healthy.
M.	68	Pneumonia	All healthy.
M.	48	Pneumonia	
M.	32	Mixed acute & chronic nephritis	All healthy.
M.	62	Pneumonia	All healthy.
M.	56	Lobar pneumonia & nephritis	Sphenoidal full of clear fluid; all others healthy.
F.	17	Cerebral abscess	Frontal, antra, ethmoidal and sphenoidal all full of pus; middle ear and mastoid cells healthy; R. lateral sinus contained septic thrombus, left healthy.
M.	—	Epithelioma of upper jaw	All healthy.
M.	74	Pneumonia	Both frontal, both ethmoidal and sphenoidal contained pus. Left middle ear and mastoid antrum, pus. Right antrum of H., pus.
M.	40	Gangrene of lung & pneumonia	Ethmoidal & sphenoidal cells dark in their lining and foul smelling; no distinct collection of pus. All others healthy. R. middle ear, thick yellow pus.
—	—	Lobar pneumonia & empyema	All healthy. Frontal absent.
F.	28	Ulcerative endocarditis	All healthy.
M.	73	Enlarged prostate & nephritis (pyelo)	All healthy.
M.	44	Chronic phthisis	All healthy.
M.	47	Aneurism of subclavian	All healthy.
M.	65	Aortic incompetence	All healthy.
M.	46	Rupture of hydatid cyst & peritonitis	Ethmoidal & sphenoidal contain bile-coloured viscid fluid. R. mastoid cells contain blood.

Sex.	Age.	Disease.	Sinuses Involved.
F.	66	Chronic nephritis ..	All normal.
M.	—	Chronic nephritis, with uræmia ..	All healthy.
M.	42	Epidemic cerebro spinal meningitis ..	R. ethmoidal and sphenoidal contain thin pus.
F.	—	Cerebral hæmorrhage and nephritis ..	All healthy.
M.	—	Acute tuberculosis of lungs ..	All healthy.
M.	54	Primary lateral sclerosis ..	All healthy.
F.	22	Tuberculosis of kidney, ureter, bladder, and cerebral meningitis ..	All healthy.
M.	34	Cerebral thrombosis and softening ..	Hæmorrhage in R. M. ear and mastoid cells.
M.	16	Malaria & pneumonia ..	All healthy.
F.	77	Cirrhosis of liver and pancreas ..	All healthy.
M.	59	Septicæmia ..	Left frontal contains some clear gelatinous fluid; others healthy.
M.	36	Acute nephritis ..	Some clear fluid in sphenoidal sinus; others healthy.
M.	54	Lobar pneumonia ..	All healthy.
M.	22	Enteric fever ..	Fluid blood in M. ear and mastoid cells, coagulated in one M. ear.
F.	49	Lobar pneumonia ..	All healthy.
M.	60	Chronic interstitial nephritis & phthisis ..	All healthy.
M.	61	Chronic interstitial nephritis ..	All healthy.
M.	46	Lobar pneumonia, pneumococcal septicæmia ..	All healthy.
M.	75	Lobar pneumonia ..	Sphenoidal contained a little thin semi-purulent material; R. ear and mastoid cells contained pus; L. mid. ear thin watery pus (diplococci).
M.	60	Staphylococcal septicæmia and suppyelo nephritis ..	Sphenoidal contained thick yellow purulent material.
M.	22	Lobar pneumonia ..	Left ethmoidal and sphenoidal contained semi-purulent polypoid tissue.
M.	45	Lobar pneumonia, with pneumococcal septicæmia ..	All healthy.
M.	50	Pneumococcal septicæmia ..	Sphenoidal con. blood-st. purulent fluid (proteus & pneumococci).
M.	48	Tuberculosis of lungs ..	Blood-stained fluid found in L. frontal, both ethmoidal, R. mid. ear and cells.
Sex.	Age.	Disease.	Sinuses Involved.
		And intestines ..	Sphenoidal cont. clear fluid, others healthy.
M.	3	Fracture of skull ..	Left frontal contains a little polypoid tissue and pus, and both ethmoidal same. Sphenoidal full of thin dark blood. Mid. ear cont. a little blood.
M.	58	Broncho pneumonia ..	All healthy.
M.	39	Tuberculosis of lungs and intestines ..	All healthy.
M.	60	Ch. interstitial nephritis ..	All healthy.
M.	49	Tuberculosis of lung, empty and lardaceous dis. ..	Thin pus in L. mid. ear and antrum. Both antra of Highmore contained some pus.
F.	24	Puerperal pyæmia ..	All healthy.
F.	39.	Ch. phthisis, tub. ulceration of bowel and peritonitis ..	All healthy.
F.	10	Ch. phthisis, tub. meningitis, tub. disease of sphenoidal sinus and mid. ear ..	Sphenoidal cont. some yellow pus (streptococci, staphylococci, and tub. B.), L. mid. ear pus (tub. bacilli).
M.	63	Carcinoma of stomach, liver, and intestines ..	Left mid. ear contains some pus, also mastoid antrum; others healthy
M.	17	Lateral sinus thrombosis ..	Sphenoidal sinus contains clear fluid; R. mid. ear antrum and lateral sinus contain pus. Internal jugular vein in neck is quite healthy. Temp. bone has a dark appearance. (Diplococci, probably pneumococci).
F.	40	Ch. nephritis and uræmia ..	All healthy.
M.	23	Fracture of skull ..	Sphenoidal (traversed by fracture) cont. blood. L. mid. ear and antrum traversed by fracture, and cont. blood.
M.	39	Ch. nephritis and hæmorrhage into ..	Some fluid in L. ethmoidal; others healthy
M.	49	Double lobar pneumonia ..	R. mid. ear cont. semi-purulent fluid full of pneumococci; all others healthy.
M.	24	Pyæmia and double empyema ..	Attached to inner wall there is a dark polypus in frontal sinus, left. Antra of Highmore both contain pus.

Sex. Age.	Disease.	Sinuses Involved.	Sex. Age.	Disease.	Sinuses Involved.
M. 35	Ch. int. nephritis ..	R. mid. ear and mastoid antrum contains pus. Bone in attic dark-coloured; all sinuses healthy.	M. —	Cerebral hæmorrhage	L. mid. ear contains fluid
F. 49	Ch. int. nephritis, uræmia	All healthy.	M. 15	Enteric fever ..	Both ethmoidal, sphen. same, others normal.
F. 23	Acute miliary tuberculosis	R. sphenoidal is divided into two compartments by an almost complete transverse partition.	F. 65	Broncho pneumonia	R. and mid. ear contain pus, temporal bone decidedly hyperæmic (staphylococci) & some large fat bacilli.
M. 71	Endocarditis and lobar pneumonia	All healthy.	M. 10	Cystic sarcoma of pituitary body and cerebellar abscess	Sphen. full of cholesteatomatous material, purulent in floor of sinus.
M. 19	Lymphadenoma and septic broncho pneumonia ..	R. ethmoidal sinus contained polypus size of an almond; all others healthy.	F. 40	Cerebral hæmorrhage	Sphen. occupied by growth. All healthy.
M. 64	Gangrene of lung ..	Frontal contains clear viscid fluid (streptococci, diplococci, and bacilli).	M. 68	Gangrene of lung ..	All healthy. Three sphen. sinuses all communicating with nose; middle very small.
F. 47	Acute tuberculosis ..	Left ethmoidal cells dark in colour, and lining memb. same; sphenoidal cont. fluid; E. dark and foul; L. clear, bone dark in colour, cont. bacilli, streptococci, staphylococci, and diplococci (not unlike pneumococci).	F. 38	Empyema and septic peritonitis ..	Ethmoidal cells contain fluid. Memb. dark in colour; fluid found reminded one of fluid in two cases of gangrene of lung.
M. 65	Epithelioma of tonsil, septic broncho pneumonia ..	L. sphenoidal divided into an upper and lower compartment by a horizontal partition; upper free from pus, lower full of thick yellow pus; no T.B. diplococci (like pneumococci).	M. 64	Hemiplegia	All healthy.
M. 43	Uræmia	R. sphenoidal contains some clear brownish fluid; mid. ear and antrum cont. some (streptococci, staphylococci & diplococci).	M. 58	Carcinoma of prostate	All healthy.
F. 35	Puerperal pyæmia	L. sphen. clear brownish fluid (staphylococci).	M. 39	Empyema	All healthy.
M. 6m.	Hydrocephalus ..	R. antrum of Highmore cont. some brown fluid.	M. 37	Malignant disease of intestine	All healthy.
F. 80	Septicæmia staphylococcal	All healthy.	M. 10	Acute infective osteomyelitis (staphylococcal septicæmia	All healthy.
M. 48	Aneurism of aorta ..	R. sphen. contains brownish fluid (staphylococci).	F. 31	Puerperal septicæmia	All healthy.
M. 75	Lobar pneumonia & ch. in. nephritis ..	All healthy.	M. 50	Enteric fever ..	All healthy.
M. 40	Cerebral hæmorrhage and ch. nephritis	All healthy.	M. 13	Acute infective peritonitis, and staphylococcal pyæmia and septicæmia	Sphen. cont. pus, both cavernous sinuses are full of pus. Antra of Highmore cont. pus with necrosis of alveolar border, pus cont. staphylococci, aurei. R. middle ear, thin yellow pus; abscess in temporo sphenoidal lobe.
M. 40	Ch. phthisis ..	R. and L. sphen., clear fluid.	M. 25	Acute miliary tuberculosis	Sphen. thin sero-purulent fluid. No T.B. staphylococci. Other sinuses healthy.
			M. 43	Fracture of skull ..	Both sphen. sero-purulent fluid. Other sinuses healthy.

Sex.	Age.	Disease.	Sinuses Involved.
F.	17	Pelvic Abscess ..	All healthy. R. frontal absent.
M.	49	Gall stone. Ulceration of duodenum and septic cholangitis	All healthy. Mid. ear cont. a little bile-stained fluid. (Patient was deeply jaundiced.)
F.	56	Fracture of base of skull	R. sphl. cont. some blood and polypoid tissue; the left, pus and polypoid tissue. R. mid. ear cont. blood due to fracture of petrous bone
M.	6 months	Gastro enteritis ..	All healthy.
M.	48	Lobar pneumonia ..	All healthy.
M.		Acute mercurial poisoning	R. sphl. cont. polypoid tissue; L. mid. ear and mastoid cells con. blood.
F.	21	Septic endometritis salpingitis and peritonitis ..	All sinuses healthy, with the exception of the L. frontal, which cont. a small polypus about size of a split pea.
M.	31	Enteric fever and lobar pneumonia..	The bone over and around both middle ears was hyperæmic. The rest of sinuses all healthy.

(Dr. Jamieson, Director of the Pathological Department in the Sydney Hospital, has kindly allowed me to use the above information.)

SOME ABDOMINAL SURGICAL CASES.

By B. Poulton, M.D., Adelaide.

(Read at the April Meeting of the South Australian Branch, British Medical Association.)

THE active prosecution of surgical methods for abdominal lesions has become much more general during the last decade. We have now become familiar with cutting operations, not only for conditions which threaten, like intestinal obstruction and strangulated hernia, to terminate life, but for more insidious and obscure ailments, presenting, some of them, less clamorous, but not less urgent, demands for mechanical interference.

It is to the consideration of a few instances of the latter that I propose to call your attention this evening. There is nothing very special in the cases to be recorded, but I hope they may prove to be of sufficient interest and value.

The cases which I submit to-night have no particular connection, but all of them help to illustrate what may be done, or cannot be done, in various obscure abdominal lesions.

For the opportunity of seeing some of them I am much indebted to Dr. Verco and other

friends, who have themselves diagnosed the conditions.

A spinster, aged 41, was admitted to the Adelaide Hospital on January 5, 1902, complaining of pains in the chest. About eighteen months previously she had an attack of severe epigastric and right hypochondriac pain, with vomiting of bile coloured fluid. The attack lasted a week, and, after a few days' relief, recurred with greater severity, prostrating her for a fortnight. Since these primary attacks there have been five or six of a similar nature, sudden in onset, characterised by great abdominal pain and urgent vomiting, subsiding in from one to six hours, more slowly of late. A week ago she was in pain all night, with temporary relief following during the next day. Since then pain has been continuous. Diarrhoea has usually attended the attacks.

There has never been jaundice, and the motions have always been dark. Gall-stones have never been passed.

She is an industrious, sober person, resident in Scotland until about four years ago.

The family and personal history is good.

She was admitted into Dr. Verco's ward with rapid respiration, a pulse of 112, and a temperature of 100·4°.

There was a hectic flush of the cheeks; the tongue was moist and clean.

Right liver dulness extended from the lower border of the fifth rib to just below the costal margin in nipple line and higher in mid-axilla. There was tenderness in the right hypochondrium, with increased sense of resistance. There was a faint systolic bruit in the mitral area.

There was evidence, by physical signs, of fluid in the left base of the thorax.

The urinary secretion was normal.

Dr. Verco demonstrated the presence of pus by aspiration.

Seen the next day the condition was unchanged, and the prostration and distress were very marked. Under ether an indefinite tense mass was felt in the right hypochondrium. Bile-stained pus flowed from a needle inserted below the left ninth rib in the posterior axillary line. Resection of a portion of the rib and incision of the parietal pleura evacuated some clear pleural fluid. The diaphragm was seen and felt bulging upwards, was stitched to the parietal pleura and incised. About a pint of yellow fluid, apparently bile-stained muco-pus, escaped.

The cavity extended past the middle line at the epigastrium. A rubber drain was inserted, and removed after twelve days, discharge having almost ceased, although a probe entered for six inches.

She left the hospital on the 30th day, having a sinus $3\frac{1}{2}$ inches long, but almost dry. The general condition was good, appetite and strength had returned, the tenderness in the right hypochondrium had subsided; vomiting, which persisted for some days after the operation, had ceased. There was no evidence of a distended gall bladder, and careful search for gall-stones in the fæces had been unsuccessful.

During the early days of treatment it seemed probable that an exploration of the gall bladder would be desirable, but up to the time of writing there has been no necessity for further interference, no return of pain or discharge.

This would seem to be an instance of left sub-phrenic abscess, with pleurisy following erosion of the cystic duct, but why the abscess should have presented on the left side I do not know. It is probable that the origin of the trouble was the impaction of a calculus which is still unevacuated.

Another "liver case," admitted on March 3, presents some special points of interest.

An Irish spinster, aged 60, a resident in South Australia for 23 years, had been ailing for four months, suffering from anorexia, vomiting, and pain in the right hypochondrium. She attributed her illness to over-exertion in lifting washing-tubs.

For two weeks she has been yellow, and the stools have been "white."

She has been a hard-working, active person, enjoying good health.

She is very fat, deeply jaundiced; the heart is apparently normal; there are a few crepitations at the right base behind. The temperature was 99° , pulse regular at 88.

There is an indistinct mass present in the right hypochondrium; some tenderness on deep palpation. The liver dulness extends from the lower border of the fifth rib to the costal margin in the mid-axillary line. Abdominal palpation is difficult from the amount of adipose tissue present. The urine contains bile.

In view of operation and probable hæmorrhage, a scruple of calcium chloride was given three times daily for four days, and then under nitrous oxide and ether anæsthesia the abdomen was explored by incision through the right upper linea semilunaris. The omentum and liver were found studded with malignant nodules. The gall bladder was large and distended, and by incision a pint of dark thick bile evacuated. No stone was found, and the bladder was closed by sutures and fastened to the parietal peritoneum. There was clearly nothing more to be done. Two days after she suddenly complained of pain in the chest, felt uneasy, perspired profusely. Her pulse was weak and rapid, 120.

Stimulation by brandy, strychnine, and ether was carried out, but three hours after the onset of unfavourable symptoms she collapsed and died.

The necropsy by Dr. Mainwaring showed no leak of gall bladder, no signs of peritonitis; that a large scirrhus mass occupied the head of the pancreas; that there were numerous secondary deposits in the liver, mesentery, cæcum, uterus, lungs and right kidney.

Vegetations were present on the aortic and mitral valves, and in the right ventricle were found a number of small ante-mortem clots entangled in the meshes of the tricuspid valve. The lungs were slightly engorged, but no embolus could be found.

The satisfactory condition of this patient after the operation, until three hours before her death, and the symptoms she then exhibited, with the post-mortem appearances, point with some clearness to cardiac thrombosis and pulmonary embolism. There is nothing else to explain her sudden collapse, which is specially significant as occurring after the use of chloride of calcium. The short duration of this patient's illness (four months), and the very considerable quantity of adipose tissue present, are noteworthy in respect to the advanced stage of malignant disease in the pancreas and other parts. The possibility of embolism after abdominal section was brought very vividly before me last April. Eleven days after a typical appendicectomy for relapsing appendicitis, where no unfavourable symptoms had developed, all sutures had been removed; and the patient was quietly lying in bed, hoping to get up before many days, sudden death occurred. The man had drank his early morning tea, feeling very well. Between six and seven he rang for the nurse, being distressed by dyspnoea and thoracic pain. I saw him soon after gasping for breath, livid, suffering intensely from precordial anguish, perspiring profusely, actually struggling for life. He died before eight o'clock unrelieved by heat, stimulants, or oxygen inhalation, and afterwards Dr. Morgan found ante-mortem emboli in branches of the pulmonary artery, and a thrombus in the right common iliac vein. So that one may get embolism without known interference with any large vein, without the previous use of chloride of calcium.

Were one not, however, to remove a damaged and probably explosive appendix, fearing the remote risk of pulmonary embolism, one would run many more likely risks, one of which is illustrated in the following case:—

A schoolboy, aged 14, admitted to the hospital on September 10, 1901, had been suffering for over three weeks from vomiting without

pain. He had always been a ravenous feeder, and often suffered from attacks of vomiting; otherwise he was strong and hearty.

During the last eight days there has been present a very obstinate condition of the bowels, which have not acted for some days, and then only after repeated purges and enemata. Of late vomiting has been frequent, pain continuous, and nourishment has only been given per rectum. On admission he was pale, with an anxious expression, his tongue coated and dry, the pulse 130, the lower abdomen markedly distended. Vomiting caused increase of the ever present abdominal pain.

The left iliac region and left flank was dull on percussion, the area of dullness shifting on changing the patient's position. Rectal examination discovered nothing abnormal. On the same afternoon distention was greater, respiration hurried, and the pulse rate 160.

Under chloroform and ether anæsthesia a central coeliotomy discovered omental adhesions, chiefly at the right pelvic brim.

They could not be all detached, so a further incision was made on the right side, and numerous adhesions of omentum to small intestine and pelvic wall were broken down or divided. The appendix, enlarged and lying over the brim of the true pelvis, was detached with some difficulty and removed. It contained calcareous masses.

Flatus was passed soon after the operation, but very severe shock continued, and was only relieved by treatment including saline transfusion.

Death occurred early next day.

Post-mortem, many further adhesions in the right side of the abdominal cavity were found.

Here was a case in which long-standing appendicitis in early youth had caused plastic peritonitis and obstruction of the bowels, and in which earlier operation would probably have been followed by success.

Of irreparable damage resulting from undue delay and reluctance to undergo operative treatment, the following is a good example:—

A married woman, aged 44, was admitted on March 1st of this year. She had been ailing for four months, having previously enjoyed fairly good health. For three months she suffered from general weakness and pains in the joints of her lower limbs. A month back pain occurred in the right thorax, without cough or expectoration. A week afterwards she says a hollow needle was inserted into the right chest and some clear fluid drawn off. Cough and dyspnoea began after a few days, but expectoration of sputum was absent until quite recently. It was at first blood-stained.

On the day of admission pus was found by aspiration of the right thorax, and she was sent to the hospital.

On examination she was found to be thin, weak, sallow and very anæmic. She suffered from dyspnoea, and preferred the sitting posture. Cough was frequent and expectoration of muco-pus considerable.

Respiration was 30, pulse 98 small and compressible, temp. 98.4° F.

The cardiac apex beat was diffuse, and most distinct in the fifth intercostal space in the nipple line. The cardiac dullness was slightly increased laterally. A systolic mitral bruit was noted.

The chest expansion was very limited on each side, especially the right. All the signs of a very large quantity of fluid in the lower two-thirds of the right pleura were recorded. The tongue was moist and clean, the appetite was poor, the bowels were loose, and no urine was obtainable owing to its admixture with faeces.

It was arranged to evacuate the pleural cavity on the afternoon of March 4, but at 1.30 p.m. respiration became suddenly embarrassed, cyanosis soon set in, and in spite of active stimulation death soon occurred.

The necropsy showed the presence of a large empyema with collapse of the right lung. The left lung and pleura were normal.

The pericardium contained about three ounces of clear fluid. No valvular lesion was discovered, and the cardiac walls were apparently healthy.

There were dense adhesions between the under surface of the right lobe of the liver, the right kidney, and the hepatic flexure of the colon. A huge pyonephrosis and perinephritic abscess was found on the right side, the abscess communicating behind the liver through the diaphragm with the right pleural cavity. There was a large branched calculus in the right kidney. The ureter was apparently patent, allowing the passage of a probe, but its upper half was surrounded by dense adhesions, which might have closed it during life. The left kidney was slightly cystic but otherwise healthy.

No communication between the right pleural cavity and a bronchus was demonstrated.

I have since found that my friend Dr. Evans, of Hindmarsh, diagnosed stone some months before her admission, and that he was not allowed to do more than aspirate the chest.

The closeness of abdominal, thoracic relations and pulmonary pleural disturbance, following intestinal lesions, is also illustrated in the following case:—

A matron, aged 53, but looking much older, was admitted under Dr. Verco, on May 13, 1901, complaining of pain in the right side of

her chest and abdomen. She had generally enjoyed fairly good health, and was an active person. Three weeks previously she suffered a severe attack of pain in the right side of the abdomen with vomiting, remained in bed for 24 hours, and then resumed her household duties until the 9th inst., when the pains recurred with vomiting, the latter symptom soon ceasing; the pain has not abated. She has been constipated, and only secured an evacuation of the bowels yesterday after a purgative. There have been no previous attacks of the sort.

In Dr. Verco's ward it was noted on admission that she was suffering much pain. The temperature was 102°; respiration, 20; pulse, 108. The tongue was dry. There was pain in the right chest, increased by inspiration, and, moreover, tenderness in the right subaxillary region. Here, too, the resonance was impaired, and friction sounds with subcrepitant rales were audible.

Behind resonance was impaired from 1½ inch above inf. angle of scapula vertically downwards 4 inches, and over this space respiratory murmur was weak and vocal resonance decreased. The abdomen was large and fleshy. The hepatic dulness not increased; some tenderness in right hypochondrium.

On May 28th the hepatic dulness had disappeared, there was no axillary dulness, but respiratory murmur and vocal resonance were still diminished.

Below the posterior area of thoracic dulness was noted an hyper-resonant area, where respiration was almost inaudible and vocal resonance was abolished. A hollow needle being inserted, fœculent smelling gas escaped, and on the following day aspiration evacuated foul-smelling, purulent fluid freely.

Transferred to my ward on the 31st. Under ether, three inches of the eighth rib, right in the post axillary line, were excised, foul smelling white purulent fluid, tapped by canula, and after suture of the pleura, the scalpel pushed freely through. The pus-containing cavity appeared to be supra-diaphragmatic, the ribs being easily felt above, and what was apparently the diaphragm below. This was attached by adhesions to the pleura in places, and was perforated, at one spot admitting the finger-tip. A long probe passed vertically upwards 4 inches, inwards and forwards towards the lower sternum 6½ inches, and down through the perforation 9½ inches. The cavity was washed out, a long rubber tube inserted down through the perforation, a shorter one into the upper cavity. The profuse discharge became distinctly fœculent next day, and so

continued for over three weeks. It was somewhat lessened by the daily insertion of tampons, the abdominal tubes being removed. She made a slow recovery, passed through a pneumonia of the left upper lobe, and suffered at times from mental disturbance, but was able to leave hospital within two months of the operation.

You have seen her this evening still presenting a small sinus which admits a probe from the site of incision to the appendix region (9½"), and which exudes a little purulent discharge. Her general condition is favourable.

I am at present reluctant to proceed to any further operative measure on account of her age and liability to mental disturbance, but shall not hesitate to do so should occasion arise, and would expect to find an appendix at the bottom of her troubles.

I am indebted to my late house surgeon, Dr. S. Verco, and to my present house surgeon, Dr. Flecker, for very careful notes of the hospital cases.

THE CURE OF RODENT CANCER BY ELECTROCUTION.

By William R. Fox, L. & L. Mid., R.C.P., R.C.S. (Edin.), Melbourne.

RODENT cancer is a disease which has in the past been known by a variety of names, a glance at the long list of which will afford clear evidence of the long-standing dispute as to its exact nature. It has been known as rodent ulcer, Jacob's ulcer, from Jacob (who was one of the first to investigate it), canceroid ulcer, ulcère chancreux de visage, ulcère roueant, canceroid de la face, rodent lichen, rodent cancer, fläche epithelial krebs, lupus exedens, and noli me tangere, or the true lupus of the older writers. It undoubtedly occupies a position on the borderline of cancer, but whether it should be definitely classed with the cancers has always been a matter of dispute. No one attempts to deny its local malignancy, but from the fact of its never causing secondary deposits or systemic infection many have sought to argue that it should not be classed with the true cancers. Moore, in his book on this disease, published in 1867, called it rodent cancer. Thiersch describes it as a flat or superficial epithelioma; and Liebert also classes it with the epithelioma; Billroth considers it a cancer of the skin; Cæsar Hawkins places it amongst the cancers; while Sir James Paget writes of it as follows:—"The pathology of rodent ulcer has, during the past few years, been studied with so much success that it is possible now to class them amongst the cancerous ulcers. This being so,

it seems scarcely necessary to still call them rodent ulcers. Probably the term will gradually cease to be employed." Rose and Carless state that it is generally admitted to be a cancerous tumour of an epithelial type; while Hamilton says there seems little doubt that it is of an epitheliomatous nature; Snow says it is a variety of epithelioma; Bryant calls it epithelial cancer; and Quain places it amongst the cancers. Erichsen considers that it stands midway between the innocent and the malignant tumours. Histologically, Payne says that it very closely resembles flat-celled epithelioma, and considers that the difference between these two diseases is probably one of origin, squamous epithelioma arising from that portion of the epidermis which is endowed with the power of forming superficial horny scales, while rodent ulcer originates in that portion which either has formed, or is capable of forming, the appendages of the skin. Hence it will be seen that, in calling it rodent cancer, one has plenty of authority for the title.

Although the progress of a rodent cancer is usually extremely slow, its action in destroying every tissue that it attacks is as remorseless as that of the worst forms of cancer. If unchecked by treatment it slowly, yet persistently, pursues its relentless course. No tissue can withstand its attack, and in some of the worst cases the nose, the cheeks, the eyes, and even portions of the brain have been eaten away by it. In St. George's Hospital Museum there is a specimen of a case in which a patient lost every feature of his face except one eye, which was in the same cavity as his tongue. The malignancy of its local action is thus beyond question.

Until very recent years the treatment of this intractable disease was limited to three methods, namely, excision, the application of the actual cautery, and the application of powerful caustics and escharotics. These were all exceedingly painful; excision was perhaps the least so, but the application of the actual cautery necessary to efficiently destroy the disease was very severe; and the intense pain produced by powerful caustics, such as fuming nitric acid, acid nitrate of mercury, chloride of zinc, Vienna paste, or strong sulphuric acid, was so great as to render this mode of treatment only a last resort. If one attempted to lessen the severity of the application by reducing its strength, it only seemed to render it useless without sensibly relieving the patient's sufferings. During the last few years, however, three new methods of treating this disease have been brought forward, which, besides possessing the very great advantage of being practically free from pain, have so far given results

as good as, if not better, than the old modes of treatment. They are:—

1. The destruction of the growth by comparatively large currents of electricity.
2. The application of the X rays.
3. The application of the Finsen light.

I propose in this paper to deal more particularly with the first of these methods, namely, the destruction of the growth by electricity. This is effected under anæsthesia by an operation which was first described, so far as I know, by Dr. Inglis Parsons, of Mayfair, London, about eight years ago, and I cannot do better than give you a description of the operation as performed by him. It consists of a complete destruction of the whole of the invaded tissue by electricity. He employed a Bichromate battery of about 80 cells, having a potential of about 160 volts. The two wires from this are attached each to a holder containing a platinum or gold needle. These two needles are inserted in the healthy tissue on one side of the growth, and quite clear of it, so as to be fairly parallel to each other, but some little distance apart, say half-an-inch or so. It is, of course, necessary to have some form of switch in the circuit in order to promptly turn the current on or off. For convenience sake, I have placed this in one of the handles carrying the needles, since in that position the current is completely under the control of the operator, who can close or open the circuit instantly. Now, the amount of current which will pass across the tissue which intervenes between the needles depends on two things: the resistance of these tissues themselves, and the voltage of the battery employed. The wider apart the needles are, or in other words, the greater the width of tissue between them, the greater the resistance and the less current will pass with a fixed voltage. On the other hand, if the needles remain in a certain position, that is, in other words, the resistance is fixed, it becomes necessary to increase the voltage by employing more cells in the battery if we wish to increase the amount of the current. There are thus two ways of increasing the current, first by decreasing the resistance, that is by bringing the needles closer together, and second by increasing the voltage, that is by employing a larger number of cells. In one of these ways, or both, any desired current may be obtained. Dr. Parsons employed the form of battery known as Stohrer's, in which the number of cells in use may be increased by pushing the sledge along to the required point. Having placed the needles in position, a current of about 40 or 50 volts is switched on and the milliamperemeter read. Since contact is only kept up for one or two seconds, it is well to

have a milliamperemeter of the "dead beat" variety, which will give a reading instantly. Less than 300 to 400 milliamperes is useless, and if the instrument shows less than this the voltage must be increased by using a greater number of cells, until the current necessary to destroy the tissue is obtained. This may also be effected by having a rheostat in the circuit and gradually taking it out. The current should only be kept on for one or two seconds, and then interrupted. It is then reversed, and again sent through in the opposite direction for one or two seconds. It is requisite to produce a certain effect, and the current must be increased until this is obtained. The effect required is made evident to the operator by a striking change in the appearance of the soft tissues between the needles. When the current has been made sufficiently large these instantly change colour. All circulation in them ceases, and they become of a yellowish white colour; they are, in fact, dead. When this change is clearly apparent, one needle is withdrawn and reinserted a similar distance on the opposite side of the other needle, so as to take up a fresh piece of tissue continuous with the first, and this is destroyed in the same manner. This process is continued until the growth is completely encircled. Its vitality is thus entirely destroyed, it is electrocuted in fact, and is converted into a piece of dead tissue, a slough, which rapidly separates, leaving a cavity covered with healthy granulations, which quickly fill it up and complete the healing, nothing remaining but a scar. The after-treatment is of the simplest description, and merely consists in keeping the part clean and in assisting in the shedding of the slough. In the case I desire to bring under your notice, I used for the operation 50 accumulator cells, having a potential of 100 volts, and capable of giving a current far in excess of requirements. The maximum current I employed considerably exceeded 1,000 milliamperes, although Dr. Parsons says 300 to 400 is usually sufficient. He, however, states that he has used as much as 1,000. The effect of this enormous current was most striking. The death of the tissue took place almost instantly, but in addition to this its effect on the patient was most peculiar. Every muscle of the face twitched violently, and not only the muscles of the face, but every muscle in the body seemed to participate in a sudden spasmodic contraction, which shook the table almost as though it had been struck a blow. It has been said that there is in this way some danger of shock; but speaking from an electrical point of view, I should say that it is impossible to get sufficient current to be dangerous to traverse parts any distance from

the needles. To be on the safe side, however, it would be as well to confine oneself to ether or ACE mixture as an anæsthetic, since there is just a possibility of the sudden muscular spasm I have described affecting the heart. Since the death of the tissue is complete it follows that there is no hæmorrhage. This is distinctly shown in the fact that, supposing a drop or two of blood flows when the needles are first inserted, it instantly ceases on the passing of the current. Since the nerves are all also completely devitalised, there is no pain whatever after the operation.

Now we all know that rodent cancer has been cured both by excision, by cautery, and by caustics, but the operation I have just described possesses great advantages over any of these methods. It is, for instance, quite free from the intense pain which invariably accompanies the use of the cautery or strong escharotics, as well as from the great risk of failure of these from inefficient application. Compared with excision, again, the freedom from hæmorrhage is of great importance. In so vascular a part as the face the free hæmorrhage which accompanies the first incision by the knife always tends to obscure the rest of the operation. It is very necessary to avoid cutting away more of the healthy tissue surrounding the growth than is absolutely necessary for its complete and thorough removal, on account of the resulting disfigurement of the patient's face. It must necessarily be difficult to do this when the face is flooded with blood; and although bleeding is now always completely and thoroughly controlled in all operations, we all know that it is frequently difficult to do this, especially in parts well supplied with blood vessels. Parsons mentions a case where the hæmorrhage was so severe as to interfere with the operation, and rendered it only partially successful, yet at a later stage, and when the growth was much larger, it was removed by this method without any hæmorrhage whatever.

It has never been proved that any contamination of the healthy tissues surrounding a malignant growth can be brought about by a knife which has just passed through part of the invaded tissue, but on the other hand, it has never been proved that this cannot occur. In the operation I have just described this risk—if there is any such risk—does not exist. The insertion of sutures, too, which is the usual procedure after the operation of excision, is rendered unnecessary. It is a well-known fact that after the most carefully-conducted operations sutures sometimes give rise to trouble, and it has always appeared to me that the insertion of sutures after the removal of a



BEFORE OPERATION.



AFTER OPERATION.

TO ILLUSTRATE DR. FOX'S PAPER ON "THE CURE OF RODENT CANCER BY ELECTROCUTION."
(Photos. by Dr. Fox.)

malignant growth may result in sufficiently local irritation to be a direct factor in causing the disease to return. Whether this be so or not, sutures are not employed in this operation, and hence there can be no after-irritation from that cause.

The resulting slough separates in a few days, from three to five or six, and the wound then rapidly heals up. The cicatrix which results is also said to be less than that which occurs after excision. In the case I am reporting it took longer than usual to heal, owing to the fact that I destroyed the growth so effectually that I destroyed a piece of the nasal bone as well, which took a week or two to separate and shed.

In describing this operation, Dr. Parsons attributed the result to electrolysis. Now, although electrolysis sufficient to end in the destruction of the part may take place when smaller currents are employed, this is not the case when these large currents are used. Only the very slightest evidence of electrolysis is seen, and the tissue is killed, not by electrolysis, but by electrocution. The action of electrolysis would be in the direction of a chemical decomposition at the needles, which might be of such a character as to set up rapid inflammatory destruction of the part, but this is not so with these larger currents. The chemical decomposition at the needles is comparatively slight, and the change in the tissues is due to death and not to decomposition. The death of the tissue is practically instantaneous; its circulation is arrested and its sensation destroyed. This would not be the case were it due to electrolysis. I therefore maintain that this is as truly electrocution as if a current, sufficient to destroy life, were sent between the crown of the head and the foot, the only difference being that we limit the destruction of vitality, in the operation I have described, to the small piece of diseased tissue. In the case of the execution of a person by electrocution, one could hardly maintain that such a result was produced by electrolysis, and I think it has just as little to do with the rapid and practically instantaneous destruction of the tissue of a rodent cancer. The inflammatory destruction of the part, as a result of electrolysis pure and simple, would also be accompanied with much pain, which is not so in this case.

With regard to the risk of recurrence, it is too early to speak with certainty, but there is no reason to suppose that it can be any greater after this method than after the older ones. On the contrary, there is every reason to suppose that it will be less; indeed, so far as Dr. Parsons' observations go, this appears to be the case. Should any recurrence take place, it can

be promptly and easily cured by an early resort to the same treatment, which in the very early stage is a small matter.

With regard to the other two new methods of treating this disease—namely, by the X rays and by the Finsen light, I do not propose to refer to these in detail, but will reserve that, possibly for a future communication. There is no doubt whatever about the success of both these modes of treatment, and it is probable that later on it will be found that each is more suitable to some particular class of case.

The case to which I wish to draw your attention was sent to me by my friend, Dr. H. W. Bryant, of Williamstown. He thought it might be treated by the X rays, but as soon as I saw it, I concluded that it was a typical case for treatment by electrocution. The operation was accordingly carried out last August, and the patient has remained well ever since. The following notes of the case were kindly sent to me by Dr. Bryant:—

"Mrs. ———, *et. 60*, has had good health all her life. No family history of cancer. About three years ago a small warty growth appeared on the right side of her nose. This gradually became an ulcerating sore, which slowly eat into the surrounding tissues. This was operated on at Daylesford, and remained healed for about six months, and then broke out again."

The photograph shows the condition of the patient when I saw her. The inrolled edge and the other symptoms were distinctly those of rodent cancer. Dr. Bryant sent a scraping of it to Dr. Mollison, who stated it was rodent cancer. The second photograph shows the patient after it had healed, and I venture to think that the resulting scar is less than would have followed the operation of excision. I think a comparison of the size of the growth and the size of the resulting scar will establish this. The contraction of the scar has drawn up the ala of the nose on that side, and the inner canthus of the eye down, but not sufficiently to call disfigurement.

This, then, is a brief description of this operation, which, so far as I know, is new here. It is very simple, and can be easily carried out by anyone with some knowledge of electricity.

At a meeting of the Pharmaceutical Association at Christchurch, N.Z., it was stated by a leading chemist that one firm had paid commissions to doctors amounting to 50 per cent. of the retail price. The result was that nine out of ten prescriptions written by some medical men would contain the name of the firm referred to. Druggists who paid commission frequently could not make up the loss by higher charges to the public owing to competition, and were, therefore, reduced to the position that they could not honestly dispense the prescriptions. A resolution was carried disapproving of secret commissions to doctors in any form whatever.

BIFOCAL LENSES.

By T. K. Hamilton, M.D. (Dub.), F.R.C.S.I.,
Adelaide.

(Read before the Sixth Intercolonial Congress at Hobart.)

THE public has evidently come to appreciate at last the comfort and convenience of Bifocal Lenses, as shown by the increasing number of individuals who have, of late, adopted this combined method of vision correction. Some few years ago it was quite an unusual thing to see a person wearing bifocals, and the few who did thus sacrifice appearance to convenience and utility made themselves somewhat conspicuous by so doing, for the older combinations of the two lenses produced anything but a pleasing effect. All this has now, however, to a great extent changed, as the newer varieties of bifocals are not only more presentable in form and shape, but the application of sounder optical principles has been brought to bear on their construction, and certain difficulties, which up till recently prevented them coming into more general use, have been overcome. The ophthalmic surgeon, with the aid of the scientific optician, has done much to secure this end; and utilitarian, and perhaps fashionable considerations as well, have done the rest.

The oldest form of bifocals—that in which the two lenses were of equal size, and joined in a straight line running across the centre—has now been quite superseded, and one rarely sees such combinations worn at the present time. Probably the first change made was to cement one glass on top of the other, and I am indebted to Dr. Kent Hughes for following up a reference I gave him to bifocals, as made several years ago by the *Société des Lunétiers* in Paris, and for discovering that their method was merely the cementing one. The next improvement in the method of construction was in the direction of grinding the two lenses on the one piece of glass. The adoption of this method dates back some considerable time, as well as I can gather from any available information on the subject, and from what Mr. Köhler, of Flinders Street, my optician, tells me of methods in vogue for years past in Germany and Paris. As far as my own practice is concerned, I have been using this kind of combination now for upwards of 10 years, and the glasses ground on this plan for me in Adelaide have done infinite credit in their manufacture, surface, polish, etc., to Mr. Köhler's skill and workmanship. I thought, when I first used these glasses, that they answered all expectations, and fulfilled all the indications possible under the circumstances.

This opinion I held up to about three years ago, but, at the same time, I had always a feeling in my mind that in them we had not quite gained all that was possible to attain to in the way of optical perfection, and this feeling was from time to time accentuated by noticing that a certain number of my patients found very considerable difficulty in getting accustomed to the use of these combinations, and a certain other, though proportionately a smaller number, never could or would get into the way of wearing them. This was to me extremely disappointing, as both my optician and I at one time thought that we had reached the height of perfection as far as mechanical technique, cosmetic effect, and utility all combined were concerned. Further experimentation, however, as time went on, led us to conclude that this what seemed to us mathematically perfect arrangement was really not so in its practical application; and herein lay the explanation of the difficulty, which I have just referred to, which patients manifested in becoming accustomed to their use.

The objections to this one-piece or "ground" bifocal are:—1st, the prismatic effect they produce, and 2nd, their limited range for distant vision. That this variety of bifocal always produces some prismatic effect is a fact beyond dispute, and this is due to the mechanical impossibility of centering both spherical surfaces upon the same piece of glass. The specimen which I exhibit is a one-piece lens made by my optician some years ago; its prismatic effect is almost nil, but the dispersion rays are too great, so the glass is almost useless, and it is, moreover, very difficult to make. Dr. Kent Hughes, in his first contribution (*Australian Medical Gazette*, Sept. 26, 1897) claimed originality for his optician—Mr. Pugh, of Fitzroy—in devising this one-piece kind of bifocal, but, as I pointed out in my letter in the same journal of Nov. 20th, this method of using a periscopic lens and grinding into the posterior (concave) surface is by no means a new idea, as my optician has been grinding the same for many years past, and in them the prismatic effect is lessened, but not to any great extent. Dr. Kent Hughes states that every combination is possible except + sphericals with + cylinders. He comes to this conclusion, doubtless, on account of there being no concavity to work into, but this can be overcome by making a toric lens, thereby producing a meniscus. A "toric" lens is a surface engendered by a circle which turns about an axis situated on the plane of a circle. These lenses have never been manufactured extensively, their cost being considerable, and they are chiefly used when lenses of high power are

required, and where a meniscus is of advantage. This sample (No. A) has $+9.00D$ sphere on one side and crossed cylinders $-5.00DX-3.00D$ on the other side, giving the effect of a sphere $+6.00D = -2.00D$ cylinder. Supposing a combination were required giving a sphere $+4.00D = +2.00D$ cylinder to give the periscopic form to this glass, it can be done by working crossed cylinders $+8.00D$ and $+6.00D$ on one side and grinding on $-2.00D$ sphere on the other. Lastly, there is no more difficulty in working in a compound astigmatic bifocal than there is an ordinary spherical combination. So under these circumstances, and with the experience extending over several years which I have had of my optician's work in manufacturing these "ground" bifocals of every variety, I fail to see what claim Mr. Pugh has for either priority or originality in their construction.

The second objection to these one-piece bifocals, viz., that their range for distant vision is too small, also constitutes a very serious difficulty, and one which cannot in any way be surmounted. That the near vision portion of the combination should occupy much the larger part of the whole lens is obviously incorrect, just the opposite to what it should do, and it at the same time serves to accentuate the other defect in connection with the prismatic effect. As long ago as the year 1882 Noyes, of New York ("Diseases of the Eye," p. 61), recognising the necessity of making these glasses so that the upper and weaker part should occupy the greater part of the glass, adopted the "cemented" method of construction, making the separation between the two portions a curved line with the concavity downwards; but here again a difficulty presented itself with us, owing to the liability of the presbyopic portion becoming detached from the other in our hot summer weather by the softening of the cement. To overcome this difficulty my optician has adopted a new method, which gets rid of all the cementing difficulty, and at the same time provides for the correct centering of each portion of the glass. The construction is as follows: the lower or presbyopic segment is not constructed by cutting a single glass into two parts to form the corresponding segment of the whole, but each segment is cut from a separate lens and has its own axis complete, so that the optical centre is clear of the line at which the upper and lower segments are joined together. When glasses are thus arranged, the wearer is not troubled with seeing the boundary line, for he soon acquires the habit of looking above and below it without noticing its presence. Not so with two halves cut from one piece, neither of which

has any optical centre. So much for the centering of each portion. Their fixing in the frame is provided for by the following simple and ingenious plan: the smaller segment is ground with a tongue on its convex edge which fits into a groove on the concave edge of the larger portion. This fixes the two firmly together, and allows of their being easily separated by opening the rim of the frame should one require to be replaced at any time by a new lens. This is the method of construction of bifocals which my optician has been adopting lately, and they have given me more uniform satisfaction than any other variety I have hitherto used. But even this combination, approaching, as it does, so nearly to optical and mechanical perfection in its construction, has still one defect, and that is that the wearer, looking through the presbyopic portion, feels a certain awkwardness in going downstairs and off a kerb on the footpath. To overcome this difficulty, Weeks, of New York (*N.Y. Medical Record*, Aug. 24, 1901), has still further limited the area devoted to the shorter focus by applying a small oval lens, which he calls a "paster," to the distance lens, in such a position that the wearer can look under it when going downstairs, etc. After making numerous experiments, he has adopted the following arrangement of the two lenses which he finds gives the maximum service with the minimum discomfort. On the face of the distance lens he cements a "paster" of oval shape, which measures 10 m.m. in its vertical and 15 m.m. in its horizontal diameter; this gives a field at the reading distance of approximately 19 c.m. in the horizontal and 12.50 in the vertical meridian. If the oval disc is placed 2 m.m. above the lower edge of the distance lens, it will permit a clear distance vision below sufficient to enable the wearer to see the kerb, descend stairs, etc., without trouble; in fact, to be entirely free from the annoyance in



this particular occasioned by the ordinary bifocals. The "pasters" are placed a little to the inner side of the centre of the distance lenses, so that the visual lines in reading will cut the centres of the "pasters." It is sufficient, the originator finds, to place the optical centres of the portion of the lens for reading at the

centre of the "paster." The dispersion rays of light occasioned by the edges of the "paster" can be minimised by making the edge very thin. Weeks has found these glasses excellent for all purposes, and particularly serviceable in his operative work. My optician has made me this pair, which I exhibit. We find they require very accurate fitting, and they must also be considerably tilted so that the plane of the lenses is perpendicular to the visual axes, especially when the wearer is looking under the reading lens. The same objection, of course, obtains in this combination with reference to the necessity of using cement as in the ordinary cemented bifocals; but inasmuch as the "pasters" are so small, light and thin, they may not become so easily loosened from their attachments as a heavier piece of glass would. It remains to be seen if this design of Weeks' will prove as serviceable as it is optically correct; if it do, we may find that it will supersede all the other combinations. From the designer's high recommendation and any little experience I have had of their use up to the present, I feel disposed to give them a more extended trial.

A CASE OF ULCERATIVE ENDOCARDITIS.

By Archibald A. Hamilton, B.A., M.B., B.Ch. (Dub.),
Assistant Physician Adelaide Hospital, S.A.

I THOUGHT the following cases of sufficient interest to bring before you to-night, illustrating as it does a disease not very often met with in ordinary practice, and frequently presenting some difficulty in diagnosis.

Ulcerative endocarditis is also described as "malignant," "infective," "vegetative," and "diphtheritic," according to the different phases, clinical or pathological, which have most forcibly impressed the different writers on the subject.

The disease may occur during the course of any acute septic process, and has been specially described in connection with puerperal fever, typhoid fever, influenza, pneumonia, articular rheumatism, and gonorrhoea.¹

The liability to this complication is said to be greater when there has been previous valvular disease of old standing, and, curiously enough, it is said to occur more commonly in Germans than in English.²

Most recent writers attribute this peculiar affection of the endocardium to an acute invasion of cocci of different varieties, those most commonly found being said to be the staphylococcus pyogenes aureus, the streptococcus pyogenes, the diplococcus pneumoniae, and the gonococcus.

It has been laid down that "the association of valvular disease, recurring embolism, and fever for which no adequate cause can be found is essential for a positive diagnosis of infective endocarditis".³

Without this stable tripod of symptoms the diagnosis must be in many cases at least a matter of guesswork.

The prognosis is, naturally, extremely bad, and recovery tends to throw some doubt on the accuracy of the diagnosis.

Treatment is necessarily almost altogether symptomatic. There are some cases on record which have recovered⁴ after the use of anti-streptococcic serum, but, on the whole, the results of its administration have not been very encouraging.⁵

The following are the notes of the case from which I obtained the interesting specimen, which I had hoped would have been shown to you this evening:—

Miss M. D., *æt.* 33, shop assistant: previous health good, never having had any serious illness. Was under my care in February and March, 1900, for indigestion and debility. At that time no organic disease was detected. She consulted me on January 14, 1902, complaining of feeling faint and low spirited, and of palpitation and irritability, sleeping badly. Seen again on January 21. Still complaining of great depression, and of feeling so weak that she could hardly walk into town. I detected no organic disease, and was inclined to attribute her evident debility to overwork and anæmia. On January 28 I saw her at home. She was then in bed, temperature 98·4, perspiring very freely, and complaining much of palpitation. On examination I found a diastolic bruit at the apex, and the apex beat was outside the nipple line. This diastolic murmur persisted during the whole course of the case. Rigors followed on the ensuing days, the temperature rising to 100·4 on the 29th and 103 on January 30. She complained of much palpitation and slept badly. February 5: Urine, clear, deep yellow, 101·3, no albumen nor sugar. Dr. Verco saw her with me on February 7, and concurred in the diagnosis, at which I had already arrived, of ulcerative endocarditis. Prognosis bad. The last joint of the third finger on the left hand became swollen and tender at this time. Very slight epistaxis occurred on February 8, and on several subsequent occasions. The bowels gave some trouble, and, except for three occasions, on which they were very loose for about 36 hours, she suffered from constipation during the entire illness. February 20: Urine acid, no albumen. On February 21, tenderness and swelling developed on the front of the right

wrist, and lasted for some days. On March 8, pain behind the sternum and slight cough were complained of, as well as severe pain in the right popliteal space. A systolic bruit also was detected, audible at the apex and at the angle of the scapula. The next day there was some rusty expectoration, and pain in the left shoulder became very troublesome. A small patch of consolidation was discovered at the extreme left base, and by March 12 there were dulness, tubular breathing, bronchophony, and pectoriloquy all over both bases. At this juncture she passed into a state of collapse, but very free stimulation apparently averted impending death. Retention of urine rendered catheterisation necessary, and I regret to have to record that cystitis supervened a few days later, the urine becoming ammoniacal and offensive, and containing a good deal of stringy muco-pus. Vocal fremitus and breath sounds disappeared at both bases, and I explored them on March 25, obtaining about 4oz. of clear yellow serum from the left side. On March 30 tenderness and swelling were noted in the last joint of the right middle finger. On April 2 I aspirated both bases again, obtaining 6oz. of light yellow serum from the right and 3oz. of light reddish serum from the left. A separate sterilised bottle was used for each side, and the report from the Institute of Hygiene and Bacteriology was: "Pleural effusion contains no micro-organisms." On April 10 she again passed into a state of collapse after a fit of vomiting. Her temperature fell below 96 and her pulse was irregular and uncountable, but under the freest possible stimulation she again rallied. Three days later she had a rigor, during which her finger-tips, nails, and lips became purple. On the 16th I tapped the right base again and drew off 14oz. of clear yellow serum. On the 19th the feet began to swell, and, when fine crepitation was discovered over the whole of the right lung, when her respiration went up to 48, and her pulse to 140, death once more seemed imminent. Her abdomen now became distended and tympanitic, and this condition lasted till the end, with variations in the amount of the distension. On April 27 the hands and forearms became œdematous, and a "lumber cushion" of œdema formed. A small petechial rash appeared on the loins and fingers, and there was much tympanites. On the following day there was marked increase of the liver dulness downwards, with tenderness in the right hypochondrium. On the 30th Dr. Verco saw her with me again. Our diagnosis was unaltered, and our prognosis hopelessly bad. On May 3 extensive patches of purpuric discolouration appeared on the fronts of both

forearms and wrists, and more petechial spots came out on the body and hands. A temporary rally followed, during which the swelling of the hands and feet diminished considerably, and the tympanites partially subsided. In the early morning of May 6, after a couple of hours of extreme restlessness, she fell back suddenly and died.

I was fortunate enough to secure permission to make a post-mortem, which Dr. Cavenagh Mainwaring carried out for me, and of which he has kindly promised to give you an account. We were only allowed to open the body, and therefore cannot tell for certain whether death was ultimately due to cerebral embolism or syncope.

My diagnosis in the early stage of her illness was based on the discovery of the bruit, which I had not noted the previous week; the free sweating, rigors, and rise of temperature without any involvement of the joints or other obvious cause. No symptoms of embolism of the spleen were noted at any time, though carefully watched for, and though the autopsy showed that this complication had occurred.

That there was a rheumatic element in the case was rendered probable by the painful swellings of the fingers and wrist, unless we regard these as pyæmic. They subsided rapidly, however, without giving rise to any suppuration.

TREATMENT.

Quinine was given during almost the whole illness, combined at first with salicine, in a formula given by Burney Yeo, and later with opium, carbolic acid, and digitalis at different times. Hypodermic injections of morphia became necessary at an early period to control the insomnia, palpitation, and restlessness. They seemed to cause a good deal of sickness, even when combined with atropia, and were given up for a short time, but later on had to be resumed.

Alcoholic stimulants were soon necessary, and were given with no niggard hand, whisky, diluted with champagne, proving of especial value, and more than once seeming to turn the wavering balance in her favour. The hypodermic injection of strychnine was freely used, combined frequently with digitalin. When cystitis supervened, she had salol and benzoate of soda, for which urotropine was afterwards substituted with very good results. Acting on a recent article in the *Australasian Medical Gazette*, I gave her some diphtheria anti-toxin by the mouth.

The writer there says, speaking of this preparation: "Its action orally in septic conditions is exactly parallel with its action

hypodermically in diphtheria," and elsewhere says that its range of action is "specific for the staphylococcus and streptococcus in all their varieties." No apparent benefit resulted. Her temperature ran a most irregular course, ranging from below 96 to 105. The patient's chief suffering through her long illness arose from palpitation, flatulence, and constant restlessness. Cough was at times distressing, and, towards the end, very severe cramps occurred in the legs. Her intense dread of death was most painful, and, as far as my experience goes, unusual in one so seriously ill. The double pneumonia and double pleural effusion were very serious complications.

I must thank Drs. Verco and Lendon for their loyal support in a most trying and anxious case, and also Dr. Mainwaring for kindly making a careful post-mortem for me.

POST-MORTEM NOTES BY DR. CAVENAGH-
MAINWARING.

Body, that of a well-made female, though somewhat emaciated. Rigor mortis marked; hypostatic congestion very pronounced; several petechial marks on hands, arms, and body.

Thoracic Contents.—Both pleuræ contained about two pints of clear straw-coloured serum containing no lymph; right lung collapsed, but otherwise normal; left lung also collapsed, but in addition presented a single wedge-shaped simple infarct at anterior border of upper lobe.

Heart.—Slightly enlarged uniformly; all cavities contained dark fluid blood; walls soft. On both auricular and ventricular surfaces of both cusps of the mitral valve were numerous fibrinous deposits, ranging in size from a pea to a barcelona nut; valve both stenosed and insufficient. Similar deposits were found on all the cusps of the aortic semilunar valves. The valves of the right cardiac orifices were normal.

Abdominal Contents.—Peritoneal cavity contained a slight excess of clear straw-coloured fluid.

Spleen.—Considerably enlarged, and presented two infarcts, which had broken down and formed abscess cavities, containing white thick pus.

Kidneys.—Both kidneys very much enlarged, pale and shiny, enlargement uniform, involving chiefly the cortex; capsule stripped easily; no trace of infarcts; other abdominal organs healthy.

The brain and spinal cord were not examined, as the autopsy had to be rather imperfectly performed in a private house, and permission

could not be obtained for a thorough examination.

REFERENCES.—1. *Medical Annual*, 1898, pp. 261 et seq.; 1894, p. 323; 1896, p. 343. 2. Fothergill, *Diseases of Heart*, 2nd edition, p. 142. 3. *Clinical Journal*, 12 and 19, May, 1897. 4. *Lancet*, July 21, 1900. 5. *Lancet*, June 10, 1899, and November 4, 1899. 6. *Australasian Medical Gazette*, February 20, 1902, p. 87.

CLINICAL AND PATHOLOGICAL NOTES.

A Case of Intussusception.

C. P., aged 5½ months, had been quite healthy until the evening of October 20, 1901.

She had been fed on the breast, with one or two feeds of cow's milk daily, but on the morning of October 20th the mother gave a tablespoonful of bread and milk, as the breast did not seem to satisfy her. She was as well as usual until 6.30 p.m., when she began to whine as if in pain. She vomited and turned very pale, and "kept coming forward and bending over, as if it gave her pain to sit up straight." The vomiting continued, and the mother brought the child to me half an hour after the onset of the illness.

On examination, the child was whining and had a pale collapsed appearance. There had been no diarrhoea, and no blood or slime had come away. The child had had a natural motion some two or three hours before. On palpating the abdomen a distinct lump the size of a small egg could be felt below the ribs on the left side of the abdomen in the mammary line.

The child was removed to the hospital, and preparations made to open the abdomen if injections into the bowels under chloroform failed.

With Dr. Doolan's assistance, warm water was slowly injected into the rectum with a Higginson syringe—the child being held vertically by the heels—and at the same time the swelling was manipulated with the left hand on the abdomen. There was no difficulty in working this lump down to the region of the cæcum, but repeated injections failed to make it disappear altogether. The abdomen was then opened by an incision in the mid line, and distended colon immediately prolapsed through the wound, and its walls had a purple hue. A finger was introduced and the junction of ileum and cæcum hooked out, but there was no intussusception remaining. There was at the junction of ileum and cæcum a lump the size of a pigeon's egg, due to infiltration of the wall of the bowel with serum. Whether this was the lump we felt through the abdomen, or whether the slight traction exerted in drawing the cæcum and ileum to the wound reduced the intussusception, I cannot say.

The condition of the child was far from good, and the operation was prolonged by the bowels following the syringe when it was withdrawn from the abdomen after the insertion of the stitches. There was great difficulty in replacing them, and after the manipulation and long exposure, the outlook for the child was not bright. It was plied with stimulants in the shape of whey and brandy, and 10 hours after the operation passed a thin blood-stained watery motion. Three more of the same character were passed that day, and the child was weak and fretful. Next morning it passed a natural stool, and from that time on the motions were regularly passed and natural in character. On the second day after the operation the child seemed quite happy and free from pain. On the tenth day the temperature rose from a stitch abscess. The remaining stitches were removed on the fourteenth day, and the patient went home in 16 days with the wound soundly healed.

ALFRED CAMPBELL, F.R.C.S., Ed.

Young, 16/5/02.

A case of Intussusception treated by Rectal Injection—Recovery.

J. C. B., an infant 7 months old, was perfectly well till 3 a.m. on April 3, at which time he awakened from sleep screaming and in evident pain. He is a well-nourished, though somewhat flabby child, who has been kept entirely on the breast, except when given a crust to suck. He has not been subject to either constipation or diarrhoea, but was often flatulent; and on this occasion his mother attributed his pain to wind. She gave him a dose of castor oil, which failed to operate, and later in the day she gave him a soap and water enema; this was returned faecal, but contained a blood clot.

When I saw the child he had been ailing 36 hours. He had a temperature of 99° Fahr., and a pulse of 75 per minute; tongue clean, abdomen rigid and somewhat distended and tender to the touch, so that the child resisted palpation. He had attacks of colic every 15 or 20 minutes. He vomited only after attempts at feeding. I ordered a grain each of calomel and Dover's Powder every three hours. About 8 p.m. I was again sent for, as the child was said to have had a bad turn. On arrival I found him much as he had been at 3 p.m., but the mother said he had nearly fainted, but rallied again. On enquiry she said there had been no tenesmus, no passage of blood or mucus per rectum, no vomiting except when given

something to drink. Rectal examination showed the vestibule contained partially digested blood, free from mucus. With the assistance of Dr. Bell the child was anaesthetised, and a sausage-shaped tumour was found in the right iliac fossa. As the parents declined operation, the bowel was injected under chloroform with milk and water, but the fluid returned at once. The pelvis was then elevated at an angle of 45° and the injection thrown up repeatedly, while the bowel was manipulated, and in about 20 minutes only slight thickening remained. The child was given brandy and white of egg in water every half-hour, and in five hours' time he passed a natural motion. He was then put back on the breast, and had an uninterrupted recovery, passing two natural motions, soft and of good colour, every 24 hours.

30/4/02.—The child was seen again to-day, and is in perfect health.

J. ALBERT GOLDSMID, M.B., Syd.

Murwillumbah, N.S.W.

Methylene Blue in Supraorbital Neuralgia.

SOME seven or eight years ago I read, in a lay paper, of a Russian (I think) physician who had successfully used methylene blue hypodermically in three cases of facial neuralgia. Six months ago I looked through the last six volumes of the *British Medical Journal* and *Lancet* (i.e., for the last six years), but could find no reference to it. This induces me to publish a case that has come under my notice.

In February last Mr. X consulted me for supraorbital neuralgia of the left side. He had typhoid fever eight months previously, and ever since his convalescence he has been troubled with supraorbital neuralgia of considerable intensity. It came on every afternoon, and made him sleepless and very miserable. He had been under treatment for some time, but without benefit. He finally had recourse to hypodermic injections of cocaine, and tartrate of morphia with atropine.

When I saw him it was evident from facial muscular twitchings that the condition of his nerves was below par. His teeth were good, he was not anæmic, and there was no apparent cause for neuralgia. There were no tender spots. Taking for granted that customary measures for neuralgia had failed in the previous treatment, I put him on a mixture containing methylene blue and bromide of potassium, and persuaded him to reduce his morphia. I saw him again a fortnight later, when he told me he had left off taking the medicine, as it caused severe strangury. I then

injected 15 minims of an alcoholic solution of methylene blue (as ordinarily used for staining purposes) close to the supraorbital foramen. The process was painful, and continued to be for a day or two. With the disappearance of the pain, the neuralgia ceased entirely, and has not returned since. He is now in first-class health, sleeps and eats well.

I have since had a similar case, in hospital practice, of inferior dental neuralgia (with no apparent cause for it) of recent date. The treatment and results were identical with the above.

I should be glad if this method were tried in obstinate cases by those having better opportunities than myself, and reported on.

As to the pharmacodynamics, most will form their own theories; doubtless, the histological action of methylene blue on nerve-fibrils will form the basis of most theories.

I should have stated before that there was no loss of sensation or other bad result from the injection. One case is reported in the journals where a hypodermic injection of osmic acid cured supraorbital neuralgia; but I cannot now remember whether sensation was interfered with or not, but the reaction (local inflammation), I believe, was very severe.

H. ZWAR, M.B., Ch.B.

Clermont, Queensland.

MIRROR OF HOSPITAL PRACTICE IN AUSTRALASIA.

HOSPITAL FOR SICK CHILDREN, SYDNEY.

A CASE OF DIPHThERIA, SHOWING RECOVERY FROM POST DIPHThERIC HEART FAILURE. DEATH FROM STARVATION.

(Under the care of Dr. Macdonald Gill,
Physician, and Dr. W. F. Burfitt,
Assistant Physician.)

E.T., *et.* 10 years, was admitted to the Diphtheria Hospital, Glebe, on May 3rd, 1902. She had complained of sore throat for three weeks, and though diphtheria was diagnosed, and a large piece of membrane removed by her medical attendant from the "roof of the mouth," antitoxin was not employed. She was sent to the hospital when "paralysis was coming on."

Previous Illnesses—Measles and pertussis.

On examination the child was weak and very pale, well nourished, slight cough. No

laryngeal symptoms. *Throat*—Tonsils large, membrane on each, especially right, throat looked very dirty, neck glands somewhat enlarged. Pulse soft and irregular, 144. Temperature 100.4. *Heart* dilated, apex beat half-inch outside nipple line. Systolic murmur at apex. No paralysis of limbs or pharynx. Knee jerks absent. *Bacteriology*—No Klebs-Loëffler bacilli were found.

Antitoxin, 16,000 units (B.W. and Co.), were injected on admission.

Progress.—On the day following admission the dilatation of heart was more marked, the apex beat being $\frac{3}{4}$ in. to 1 in. outside nipple line; the same night the apex beat was very diffuse, being well felt as far back as the posterior axillary fold, and with this the patient was very restless; she coughed and retched constantly, and the extremities were cold. The pulse became still softer and extremely irregular, both in force and frequency, being at times uncountable and never under 132, mostly over 160. At 3 p.m. on this day (May 4) morphia gr. $\frac{1}{4}$, atropine gr. $\frac{1}{16}$, was divided into 15 doses, one being given by mouth every hour, and at 8 p.m. adrenalin chloride solution (P.D. and Co.) m V was injected hypodermically, followed by m VII at 8.30 p.m. The pulse, which before the first injection was 160, very soft and very irregular, in a few minutes fell to 104, and became more regular, and the tension was very markedly improved.

Adrenalin m V was again injected at 2 o'clock next morning.

Next day the patient was much quieter, rested nicely, and the pulse, though still irregular, had improved. Apex beat not quite so diffuse. The coughing and retching had ceased since 11.30 o'clock the previous night, but as they were showing signs of recurring the morphia and atropine were used as before. Next day, May 6, the patient was quite comfortable, in spite of the fact that the apex beat could be felt $1\frac{1}{2}$ inches outside nipple line.

In the afternoon the pulse was almost regular. The adrenalin was injected in m V doses for the next few days once or twice daily as required.

From May 6th the area of cardiac dulness gradually diminished, until seven days later it became normal, and the apex beat could be felt just inside the nipple line. The pulse rate also fell to 94 on this date, and became, for the most part, regular. Morphia was given hypodermically in doses of $\frac{1}{16}$ grain at times owing to the tendency to cough and vomit.

Palate paralysis was noticed first on May 8th, and persisted up to the time of death.

The urine was secreted in fair amount, varying in specific gravity from 1020 to 1028,

and just before death to 1036, but throughout showed a heavy cloud of albumen, which became much smaller in amount for a few days before the end. There was no oedema.

Feeding for the first few days was by nutrient enemata, the constant coughing and vomiting preventing mouth feeding. On May 6th and 7th the patient took food by mouth, but on the 8th the nasal tube had to be used, and as this caused vomiting nutrient enemata had to be employed up to death. Patient retained the enemata very well until May 22nd, after which they were rejected. Death occurred on May 23rd from exhaustion.

For some days before death there was a large secretion and collection of mucous and, later, muco-pus in the throat, and owing to paralysis patient could not swallow it or cough it up readily. This to some extent interfered with the tube feeding. Rapid wasting occurred towards the end. A *post-mortem* was not granted.

REMARKS.—The chief points of note are the recovery from heart failure, and the length of time the nutrient enemata were retained.

The Heart Failure.—Our experience of this trouble shows us that there are two forms of post-diphtheritic heart failure: (a) The condition ushered in with vomiting, a markedly slow pulse, sometimes falling to 46 or less, a rapid dilatation of heart, and death in the course of two or three days. *Post-mortem* examinations of the heart in these cases show it to be the seat of extensive fatty degeneration. (b) The form of heart failure exhibited by this case. Here the process is also usually ushered in with vomiting, the heart steadily dilates, the pulse rate rises frequently to over 160, and death also occurs, though not so suddenly, as in the first form. *Post-mortem* the heart muscle shows no fatty change. Hitherto all the cases of marked diphtheritic heart failure which have come under our observation have died, this being the first case in which there was undoubted recovery, as the heart regained its normal size, and the pulse became regular and of fair tension and rate; also there was no fresh dilatation before death. This result we ascribe to the use of morphia and especially adrenalin. It is also noteworthy that the child retained the nutrient enemata for nearly three weeks. She was, for the most part, unable to take any food by the mouth, and depended almost exclusively for nutriment upon her bowel. It was only on the 22nd that she was unable to retain the enemata. Death occurred from exhaustion due to starvation.

It is rather unnecessary to comment on the fact of antitoxin not being employed earlier.

REVIEWS AND NOTICES OF BOOKS.

A LABORATORY COURSE IN BACTERIOLOGY.—For the use of Medical, Agricultural, and Industrial Students. By Frederic P. Gorham, A.M. W. B. Saunders and Company, pp. 192.

This book can be thoroughly commended. It is well planned and well carried out, and bears abundant evidence of having been prepared by one who has had successful practical experience in supplying the needs of students. We think, however, that it is less qualified to supply the needs of the agricultural and industrial student than those of the sanitarian and the pathologist, though from the special standpoint of our readers this is not likely to be considered as a deficiency. It is what it is claimed to be, a laboratory handbook, and is neither a cram-book nor a popular sketch; and abstract questions are left to be dealt with in works of a more general character. The chapters on Culture and on Determination of Species are excellent, and are very well adapted to teach habits of thorough and systematic observation. In the chapter on the Pathogenic Bacteria the subject is treated in the natural way—by studying through animals by inoculations, autopsies, and isolation of organisms therefrom; and it is only by such a method that it can be properly taught or properly understood. The student who works with this book as a guide can be assured that he will gain thereby a good, sound training in bacteriological methods and equip himself with a valuable stock of practical knowledge. C.E.C.

A LABORATORY HANDBOOK OF URINE ANALYSIS AND PHYSIOLOGICAL CHEMISTRY. By Charles G. L. Wolf, B.A., M.D. W. B. Saunders and Company, pp. 203.

In the preface to this book we are informed that its object is to supply to students and practitioners of medicine "a guide to a course in physiological chemistry, and the examination of the urine and the contents of the stomach." This claim is, in our opinion, only partly sustained. The first half of the book, containing a series of simple exercises in physiological chemistry, can be recommended as practical, useful, and intelligible. The section on the urine is uneven, being careful and sufficiently full on the more commonly practised qualitative methods, but the directions for quantitative analyses are bald and sketchy, and should either be much amplified or omitted altogether. A copper-reduction process (Pavy's) of estimating sugar is recommended, and very briefly described. The easier and more accurate mercury-reduction process of Knapp is not mentioned. No description of the method of estimating sulphates is given, and there is no mention of the significance of altering relations between the aromatic and the alkaline sulphates. A method for estimating total acidity of urine is described very fully, though the author very wisely preserves a safe silence as to any practical meaning being extractable from the results. This superfluous zeal might have been better expended on the next section, dealing with the methods of examining gastric contents, where a determination of total acidity is as useful as it is useless in the case of urine. However, no serious attempt is made to deal with the clinical examination of stomach contents at all, and the section purporting to deal with that subject should have been omitted, since in its present state it can serve no useful purpose. C.E.C.

"JOE WILSON AND HIS MATES."—Henry Lawson's latest work, "Joe Wilson and His Mates,"

arrives hall-marked with the eloquent approval of the *Athenaeum*. It was originally published in England by Messrs. William Blackwood and Son, and Messrs. Angus and Robertson, with their usual enterprise and promptitude, arranged for the publication, almost simultaneously with the English, of a special Australian edition. Whether Australian readers generally will endorse the opinion of the English reviewer that the book contains "a long way the best work Mr. Lawson has given us," remains to be seen, but at all events it has already been very cordially received by his countrymen. The first part consists of what the author describes as the "Joe Wilson Series," the completion of which "in two or three short sketches" he promises his readers. Possibly, however, the second part, which comprises a number of short miscellaneous tales, will be more widely appreciated, for the various types of characters as they are to be met with in the bush and the mushroom mining settlements are graphically and realistically pictured. Humour, of the slightly sardonic kind, brightens the aspect of monotonous depression which is apt too often to form the background for the young Australian writer, while deeds of unconscious heroism are related with intuitive skill and sympathetic insight. The style is vivid and terse, a few strokes of the pen setting, as it were, a whole scene before the eyes of the reader, and enabling him to catch a glimpse of the workings of a silent and self-restrained nature. Altogether Mr. Lawson's latest volume is undoubtedly a valuable addition to the stores of genuine Australian literature of the most distinctive type. R.H.T.

ACUTE DILATATION OF THE STOMACH. By H. Campbell Thomson, M.D., M.R.C.P. (Lond.), Assistant Physician Middlesex Hospital, and Medical Tutor in the Medical School. London: Baillière, Tindall and Cox, 1902.

Dr. Campbell Thomson has done good service in collecting some 49 cases of this extremely fatal disease, five of which have come under his own observation. He discusses the subject fully and clearly, both in its clinical and pathological aspect, giving his support rather to the theory of an acute paralytic condition of the gastric musculature than to the theory of an acute obstruction due to compression of the duodenum by the superior mesenteric artery, or to that of an acute distension of the stomach by excessive secretion. The treatment which has been found most effective (for not every case of the disease has proved fatal) has been repeated lavage of the stomach, with rectal feeding, and hypodermic injection of strychnine. It is a useful contribution to the study of an obscure pathological condition. G.E.R.

"THE MEDICAL ANNUAL," 1902. Bristol: John Wright and Co., 1902.

The twentieth volume of the "Medical Annual" is before us, and, as with its nineteen predecessors, we turn to it with pleasure and confidence, knowing that in it we shall find that which—to quote from its preface—will enable us to keep "abreast of the knowledge of the times." In these busy days of many publications it is impossible to read the innumerable journals devoted to all the special subjects of medicine and surgery; but the contents of these are rendered easily available by the very excellent references supplied by the contributors to the "Medical Annual." The opening words of the

first part are: "There has been no striking development in the domain of therapeutics during the past twelve months. New remedies have been introduced, and are constantly being introduced, but do little to advance our knowledge of the treatment of disease." What reams of printed matter puffing new remedies are daily consigned to the waste paper basket!

Where all the work is so well done there is no need on our part to particularise. We can only give our congratulations to the editor and his helpers in adding another successful volume to the list of successes in what we can truthfully call "The Medical Annual."

H.C.T.Y.

RHINOLOGY, LARYNGOLOGY, AND OTOTOLOGY AND THEIR SIGNIFICANCE IN GENERAL MEDICINE. By E. P. Friedrich, M.D., Privatdozent at the University of Leipzig. Authorised translation from the German by H. Holbrook Curtis, M.D., etc. W. B. Saunders and Co., Philadelphia and London. James Little, 430 Bourke Street, Melbourne.

The claim of the translation that this is a thoroughly original treatise is well founded. It differs entirely from the ordinary text-books devoted to the study of this special department of medicine herein under discussion. The copious illustrations, among which the modified nasal snare or post-nasal curette of the writers of these books is figured, are entirely wanting, and the portions devoted to treatment are merely suggestive, but the suggestions are based on sound physiological data: herein lies their value. The pathology of the various diseases is the subject of careful study, with copious references to German and French literature. The paucity of allusions to English writers would seem to show that Friedrich is better acquainted with the works of the former than with those of the latter. This is in no sense a text-book to teach the specialist the technical part of his work, but it will lead him to reflect on the fact that diseases of the ear, the nose, and the throat are not always of local origin; that post-nasal catarrh may be due to diabetes, and that tinnitus aurium is of complex origin, frequently not localised in the organ of hearing. To the physician it will show the importance of recognising the truth that diseases of the upper air passages frequently lead to affections of the lungs; and it will make it clear that to cure the secondary disease the *fons et origo mali* must first be removed. The chapter on nasal reflexes may be referred to, as the subject is of interest to the physician and to the specialist. Friedrich says that nasal reflex neuroses are most apt to occur when opposing regions of the mucous membrane periodically come in contact with one another, nasal respiration being intact. This explains the fact that reflex neuroses are absent when the nose is packed with large polypi. Those who know anything of the subject will agree that what the translation has somewhat inadequately rendered "a nervous disposition" is necessary to the production of the nasal reflex. An apparently small local anomaly in the nose, which in a subject with a healthy nervous system will cause no symptoms, in a predisposed person will set up paroxysmal sneezing and asthma. The hereditary tendency to these maladies, which is undoubted, is not pointed out with the prominence which it deserves. A.J.B.

Dr. H. Skipton Stacy, 28 College-street, Sydney (late Resident Pathologist Sydney Hospital), examines pathological specimens, including Blood (Widal's reaction, corpuscular count, bacteriological examination of, etc), Sputum, Urine, Tissues, and Throat Swabbings.

THE AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, 20TH JUNE, 1902.

A FEDERAL MEDICAL BILL.

ONE of the important matters which must come sooner or later (and the sooner the better) before the Federal Parliament is the question of a Medical Bill to regulate the practice of medicine and surgery in the Commonwealth. At the present time each State has some sort of Medical Act, but no one is as complete or effectual as it should be; and when the Federal Medical Bill is drafted it is to be hoped that the Government will seek the assistance of medical men who have carefully studied this question, and who alone are competent to give advice and assistance.

As a first essential of such a measure registration should be made necessary to enable any person to practice medicine or surgery. The registration should be made by a General Medical Council for Australasia, with branch registration offices in the different States. Registration should only be possible for those persons who can produce diplomas or certificates showing that the holders thereof have spent at least five years in medical study at a recognised school. It may be objected that as many of the recognised medical schools of America grant degrees in medicine after three or four years of study, it would not be fair to exclude the graduates of those schools from practising in Australasia. But the General Medical Council of Great Britain requires five years of medical study, and will not register anyone whose diploma has been gained after a shorter period of study; so that in requiring a five years' course of study we should not only be following the example of the highest authoritative body on medical education, but also conserving the interests of the medical

authorities of the Australasian Universities, graduates of the Australasian Universities, all of whom are required to spend at least five years at their schools. It is manifestly unfair that persons should be able to come from abroad with degrees and diplomas obtained after a much shorter period of study, and compete with those who have been compelled to spend five years in medical study before they can be registered.

Further, reciprocity must be secured, and only those medical men should be registered who hold diplomas or degrees obtained in countries where our Australasian graduates would be registered and allowed to practice without further examination.

Provision must also be made against the registration of any unqualified persons unless they can show a lengthened term of medical study at a recognised school of medicine, as well as some years of reputable medical practice. Penalties must be enforced against medical practitioners guilty of "infamous conduct in a professional respect," and there must be a clear definition of what is included in this expression. Conditions of life and practice in Australasia are very different from those in the old country, and the strict rules enforced by the General Medical Council of Great Britain can hardly be fully applied here. Nevertheless, the broad lines of the policy laid down by that body should be capable of being enforced by law, and any breach of the regulations of practice should be followed by the removal of the offender's name from the register.

The assumption of titles by unqualified persons which suggest that they are legally qualified medical practitioners must by all means be prevented in the interests of the general public quite as much as in those of the profession.

The regulation of medical education, which is one of the functions of the General Medical Council, may safely be left in the hands of the

for we feel sure that so long as these institutions are conducted on present lines there is no danger of their failing to require an adequate standard of general as well as strictly professional education.

We sincerely hope that a comprehensive Medical Bill, founded on the broad lines above sketched, will be introduced at an early date into the Federal Parliament, and that the profession in the States will exert its fullest influence in assisting to secure such a bill becoming the law of the Commonwealth.

MENTAL SYMPTOMS IN VISCERAL DISEASE.

We are all more or less familiar with the fact that the mind exercises a profound influence over the body, and that the condition of the mind is often largely dependent on the physical state of the body. Melancholy, which, of course, literally translated in plain English, means black bile, tells of mental depression, associated with disturbance of the hepatic functions; and we know how frequently this depression can be dispelled by a dose of blue pill and black draught. It has remained, however, for Dr. HENRY HEAD, F.R.S., whose name is associated with some very valuable work on the subject of referred pain in visceral disease, to enter fully into the question of mental changes associated with visceral disease in his recent Goulstonian lectures before the Royal College of Physicians of London.

This work is based on most careful observations on patients in the Victoria Park Hospital for the Diseases of the Chest, and also in the London Hospital, where he holds the position of assistant physician. In these lectures, which are well worth the study of all physicians, Dr. HEAD leads us on by the record of most careful and painstaking observations to the conclusion that a large number of patients who suffer from organic visceral

disease (he deals more particularly with cases of chest disease) at certain periods suffer from definite hallucinations of vision, hearing, and smell, from moods of depression and exaltation and suspicion, and that these mental phenomena are always associated with referred pains. Of course, he carefully excludes all cases in which definite mental disease is present, and those in whom the condition can be definitely traced to the influence of alcohol or other drugs, such as quinine or salicylate of soda; also cases in which local disease in the ear, nose, or throat may be present. It is hardly necessary to point out what a wide field of speculation and research is thus opened up to the mind of the clinical investigator. As Dr. HEAD remarks, these symptoms are practically unknown to the general physician; but having had our attention directed to the subject, we shall be prepared to explain the occurrence of various states of mental depression and exaltation, and to understand how it is that sometimes patients, for no apparent cause, refuse food, or suddenly leave the hospital for some unexplained reason.

It appears somewhat remarkable that the, perhaps, best known mental state associated with pulmonary tuberculosis—namely, the condition of mental exaltation known as “*spes phthisica*”—is explained by Dr. HEAD on the ground of the nescience of the patient of his true physical condition. He suffers practically no pain; he is ignorant of the significance and progress of the physical signs in his chest, and of the temperature chart. But when this patient has been in hospital, and has learnt the gravity of his case from the remarks of the doctors and students, and the meaning of the fever and the night sweats, then the condition of exaltation gives place to one of less hopefulness, and possibly actual depression. This appears to us a very unsatisfactory explanation of “*spes phthisica*,” and to be one of the weakest parts of the whole thesis. The statements are hardly warranted by facts, for not unfrequently the state of exaltation is maintained throughout a patient's stay in hospital,

even up to the day of his death, although he must be quite familiar with his temperature chart and with the discussion on his physical signs by the doctors and students. Dr. HEAD dwells exclusively upon the nervous reflex theory, and does not refer to the influence on the cerebral cortex of the toxic substances formed in the bodies of patients suffering from pulmonary tuberculosis, which, we think, must be reckoned with in framing any theory to explain the facts.

THE MONTH.

The British Medical Association's Conversazione.

As already announced, the President and Council of the New South Wales Branch of the British Medical Association have issued invitations to members of the profession throughout this State to a conversazione at the University of Sydney, on Tuesday evening, June 24, from 8.30 till 11 p.m. His Excellency Sir Harry Rawson (the State Governor), Lady Rawson, and party, His Excellency the Commander-in-Chief, Lady Beaumont and staff, Brigadier-General Finn and Mrs. Finn, the Hon. the Premier and Mrs. See, His Worship the Mayor of Sydney and Mrs. Hughes, and many others have signified their intention to be present. It is expected that there will be a very large gathering of the profession and the general public on the occasion.

Recognition of the N.S.W. Branch of the British Medical Association as a Public Body.

It has long been a matter of regret that the profession of medicine has not been officially recognised at the Governor's *levées* and other State functions. We are pleased to be able to announce that, in reply to a request from the Council of the Branch, His Excellency Sir Harry Rawson has graciously consented to recognise the New South Wales Branch of the British Medical Association as the public body representing the profession of medicine at State functions. We feel sure that every member of the Branch will join with us in thanking His Excellency for so readily acceding to our request.

Inquests Without Medical Evidence.

A correspondent from a country town in New South Wales writes to us to say that the coroner

of that district nearly always holds inquests without calling medical evidence of the cause of death. He states that on a recent occasion the coroner held an inquiry without a jury in the case of the death of a young married woman who died a few hours after confinement. Only the girl's mother was present at the confinement. The coroner, without calling medical evidence, found that "death resulted from exhaustion following confinement." It is scarcely necessary to point out how utterly inadequate such an inquiry is to ascertain the full facts bearing on the cause of death. It is clear that in this case a *post-mortem* examination should have been made; and if this is the sort of inquiry usually held by the coroner in question, we think our correspondent should communicate with the Department of Justice, otherwise serious crime may go unpunished.

Civil Ambulance and Transport Brigade of New South Wales.

From the sixth annual report of this institution we learn that during the year 1901 some 2,166 cases were dealt with by the Brigade Officers and Ambulances, travelling an aggregate of 9,249 miles. Of these 1,451 were medical and surgical transports on practitioners' certificates; 93 patients were conveyed to hospital or homes otherwise than in ambulances; 120 were accidents at sports meetings; 394 were cases treated at the Brigade's Ambulance Stations according to first aid, and directed to a medical practitioner or to hospital for further treatment; and 58 were sundry minor accidents. The receipts from subscriptions and collections from all sources amounted to £1,186 19s. 5d., and the expenses for the year amounted to £1,125 4s. 4d., thus leaving a surplus of £61 15s. 1d. The receipts included £75 from the Hospital Saturday Fund, and £120 19s. 3d., being the proceeds of the Children's Fancy Dress Ball held in October last. We are glad to note that this institution is carefully controlled by the medical profession, the President being Professor Anderson Stuart, M.D.; the chairman of committees, Dr. R. H. Todd; and there is a medical committee composed of members of the New South Wales Branch of the British Medical Association, and all the lecturers and examiners are members of this Association.

State Aid to Hospitals.

When speaking at the opening of the Camden Hospital, N.S.W., Mr. See, the Premier, stated that the total revenue of the New South Wales hospitals during 1900 was £191,272, made up as follows:—Government

aid, £88,683; private contributions, £86,195; miscellaneous sources, £16,394. Those figures, however, only referred to hospitals in the strict sense of the word. In the widest acceptance of the term, including all asylums for the insane, the permanently incurable, the destitute, the aborigines, and so on, the gross expenditure of the Government during last year was £353,909. To that must be added £42,422, the State's expenditure on the Children's Relief Department. The Government aid of £88,683 was distributed in 1900 as follows:—To country hospitals, £42,171; to metropolitan hospitals, £29,781; and to the Coast Hospital at Little Bay, £16,731.

The Recent Gynaecological Appointments at the Adelaide Hospital.

A correspondent has written to us complaining of what he calls a gross act of nepotism in the recent gynaecological appointments at the Adelaide hospital. If the facts are as stated by our correspondent, the hospital Board evidently considers that family and personal considerations are of more worth in deciding upon the fitness of candidates for hospital appointments than years of experience and proved merit. It is lamentable if such should be the case, and we hope that in future the appointments at the hospital will be given to men who have shown by their past work and experience that they are the best fitted to serve on the hospital staff.

Country Hospitals and Old-Age Pensioners.

At a recent meeting of the Bathurst hospital committee a communication was received from the secretary of the Hay hospital upon the subject of the Old-Age Pensions Act as regards its effects upon country hospitals. The letter stated that numbers of paupers were leaving the benevolent asylums and making their way back to the districts where they had lived in order to claim old age pensions, and that when these pensioners became infirm and decrepid they must resort, as they are doing in considerable numbers, to country hospitals, where they would probably stay the remainder of their lives, thereby throwing a serious additional burden on these institutions. To force the district hospitals to take on the functions of benevolent asylums was contrary to the spirit of the Hospital Act, and promised to become a serious source of embarrassment and expense. The letter sought the co-operation of the Bathurst hospital committee with a view to concerted action in the shape of a demand for additional subsidy for each pensioner admitted, or such other course as may be deemed advisable. The

letter was received, and the committee recognised the necessity of doing something in the matter, and intimated a desire to co-operate with the Hay committee.

Asylum for Destitute Children, Randwick, Sydney.

This institution has just attained its jubilee, having been founded in the year 1852. The meeting at which it was started took place at the house of the late Dr. Douglass, and the asylum was opened on June 1 of that year at Ormond House, Paddington. It was aided by a munificent legacy by the late Dr. Cuthill, the first medical officer of the institution, and by grants from the Governments, and in March, 1858, the buildings at Randwick, now in use, were opened. From the 50th annual report we learn that during the 50 years the asylum has been in existence, over 4,900 boys and girls under eight years of age have been admitted. Of this number, over 2,000 have been apprenticed under indentures; 2,255 have been restored to their parents or otherwise discharged; 305 have been discharged to the boarding-out officer; and 213 have died. From the medical officer's report we learn that only one death has occurred during the past 14 years, and this took place last year, the cause of death being cerebro-spinal meningitis. Five cases of scarlet fever occurred during the year, and it speaks well for the care and attention bestowed on the inmates that no further spread of this disease occurred. Dr. Dick, the visiting medical officer, resumed his duties after his return from South Africa, Dr. James Reisch having acted as his *locum tenens*. The average cost for maintenance, education, and general management is £24 11s. 11½d. per head. An institution which does such valuable work is deserving of the generous support of the whole community.

The Queensland Weather Bureau.—We much regret to learn that the Queensland Government has decided, as a part of its retrenchment scheme, to abolish the Weather Bureau in that State. Mr. Wragge has become widely known throughout Australasia as a weather prophet, and his forecasts have proved of immense benefit to all classes, so that the loss of his services will be felt throughout Australasia. It seems that with the advent of Federation the Federal Government have charged Queensland with the expenses of telegrams, etc., in connection with the Weather Bureau, amounting to about £4,000 per annum. Previously the cost of maintenance was about £1,500 per annum, and this expense was borne entirely by Queensland, although all the States shared in the benefits of its work. Surely this is a department which should be taken over by the Federal Government at an early date, and we hope that Mr. Wragge's services will yet be retained.

BRITISH MEDICAL ASSOCIATION NEWS.

PROCEEDINGS OF AUSTRALASIAN BRANCHES.

Ballarat.

THE ordinary quarterly meeting was held at the Ballarat School of Mines on Thursday evening, April 24th. Present—Drs. Bennett, Courtney, Cussen, Gardiner, Hardy, Jordan, Martin, Mitchell, Morrison, Naylor, Palmer, Richards, Steel, G. Affleck Scott, and R. Scott.

Apologies were received from the President (Dr. W. B. Smith), and Drs. Davies and McGowan.

THE HON. SECRETARY reported the sudden illness of the President, who had come from Melbourne to give his demonstration on the microphotography of diseased brain tissues.

Dr. MITCHELL moved, and Dr. G. A. Scott seconded, "That Dr. Jordan take the chair."

The minutes of the October quarterly meeting were read and confirmed. Accounts amounting to £1 6s. 6d. were passed for payment.

THE CHAIRMAN reported that, owing to the lamented death of Dr. R. D. Pinnock, a vacancy had occurred among the trustees, which, according to the by-laws, must be filled that evening. Dr. Wm. Morrison, M.A., was elected trustee. A letter of sympathy was ordered to be sent to Mrs. Pinnock.

Correspondence was received from the Secretary of the Association and the Hon. R. T. Vale. It was resolved that Mr. Vale be thanked for his efforts to obtain a lunacy receiving ward at the Ballarat Asylum.

NEW MEMBERS.—Dr. John Steel, of Ballarat, and Peter Hannah Cunningham, of Talbot, were unanimously elected members of the British Medical Association and of this Branch.

On the motion of Drs. ROBERT SCOTT and NAYLOR, the members of the Branch were urged to join the Medical Defence Association of Victoria.

It was resolved that in future the meetings of the Branch be held at the Ballarat District Hospital, the board-room of which had been courteously placed at our disposal.

Dr. HAROLD A. BENNETT was appointed curator and librarian, and the Hon. Secretary handed over to him the pathological specimens and two framed engravings which had been bequeathed to the Branch by the late Dr. Pinnock.

Dr. R. SCOTT's notice of motion with reference to the appointment of specially qualified medical officers of health was ordered to be placed on the notice paper for the next meeting, but that the country members be invited to express their views this evening.

Dr. NAYLOR (Smythesdale) was in favour of such appointments, as the local practitioners were not sufficiently independent.

Dr. PALMER (Ararat) was also in sympathy, and thought the matter would become urgent in the near future, as the present system was undoubtedly bad.

Dr. COURTNEY (Learmouth) thought that a central officer would be able to compel councils to move against vested interests.

Dr. WILSON (Creswick) cordially approved of the suggestion.

Dr. HARDY (Ballarat) pointed out many conditions at present unworkable, notably in regard to the by-laws.

At this point, Drs. GUTHRIE and GRACE VALE, with a number of other visitors, were introduced by the Hon. Secretary.

In the unavoidable absence of Dr. W. BEATTIE SMITH, his lantern slides, about forty in number, were exhibited by an expert lanternist, and were highly appreciated by the members and visitors present, the series being a most instructive and interesting one. The comparisons between the healthy and the diseased brain tissues added greatly to a clearer understanding of the subject. The brief notes on the slides were read by Dr. G. AFFLECK SCOTT, who voiced the regret of those present that the President was unable to describe his beautiful sections and preparations in detail.

The meeting was then closed.

Victoria.

THE ordinary monthly meeting of the Branch was held at 178 Collins Street, Melbourne, on Wednesday evening, May 28th.

Dr. MCCANISH (President) took the chair, and a large number of members and visitors, including Colonel Williams, C.B., P.M.O., were present, on the invitation of the President and Council of the Branch, to hear Dr. W. Fox's paper on "The Cure of Rodent Cancer by Electrocution."

The minutes were taken as read, and signed.

Letters of apology for not being present were received from Drs. Meyer, Officer, Weigall, Kennison, and J. T. Rudall.

Dr. W. Fox then read his paper. (See page 308.)

Dr. J. WEBB preferred to divide facial cancers into epithelial, non-epithelial, and rodent. During the last 2½ years he had cured 4 rodent cancers and 2 epithelial cancers very quickly and effectively with injection of soap solution. Dr. Webb then proceeded to give his reasons for adopting this procedure, and also the results of treatment; but as this hardly applied to the subject matter under discussion, the Chairman asked him to confine his remarks to the paper, and that the Branch would be very pleased to have a paper from him on his cancer cure on some future occasion. Dr. Webb said he knew nothing about electrocution as a means of treatment of rodent cancer.

Dr. CARNEGIE said that the scar resulting after the treatment seemed to show up as if it were rather large in the photograph which had been passed round. In America, Cohnheim's theory was the most accepted by the profession, viz., that cancer was simply misplaced epithelial cells, and if the circulation could be cut off rapidly and early this gave the best chance of destroying the new growth, and also preventing the disease spreading into the general system. This was quite possible by the means Dr. Fox had been describing to them. He noted that lately ligation of the internal carotid had been done in some cases of cancer, with the idea of cutting off the blood supply. So far, he had seen nothing better than the knife.

Dr. LLOYD (North Melbourne) wished to thank the Committee for their kind invitation to hear the able and admirable paper which Dr. Fox had given them. He stated that he had no experience of this treatment of rodent cancer, but that it seemed to answer admirably. About 12 months ago he treated one of these cases with a mixture of mercury and zinc, and with three applications made a complete cure.

Dr. BECKETT expressed the pleasure this paper had been to him, and the great interest he took in this method of treatment. He would like to hear it compared with other treatments by surgeons, viz., by the Röntgen rays, and the Finsen light. He thought this treatment was suitable for small growths, but would be of no use when the disease had eaten away the nose and a good part of the face and bone adjacent. He thought Dr.

Fox flattered his brother professionals' electrical qualities when he stated that they could easily apply this method of treatment. He did not consider it would be easy to apply a 100-volt current with safety, and there was always the risk of shock. It had been laid down as a rule that any current under 500 volts was not likely to cause death; but only lately a death had been reported which had occurred through a man taking hold of a 200-volt current. There was no doubt this treatment would not be dangerous in the hands of a clever electrician like Dr. Fox, and this case was most encouraging. Dr. Massey had been using a 150 to 200 volt current, and by means of hollow needles whilst the patient was under chloroform had pumped mercury for 10 to 15 minutes into the cancerous tissues. He had not heard if this had been tried by anyone since, and concluded that it had not been a success, or more would have been heard of this treatment. Death from electricity usually occurs from shock, and so under chloroform; an old and feeble patient, with a weak heart and a disease not far away from the brain, was not wholly free from risk during this treatment. He considered that with the Röntgen rays every case could be treated more easily and with no risk under the careful operator. He quite conceded that electrocution was a much quicker method, but that it was not applicable to cases that were far advanced.

Dr. Fox, in reply to Dr. Carnegie, stated that electrocution acted exactly in the manner he suggested, viz., by suddenly cutting off all circulation completely, and quite as promptly as with the knife. The scar in this case was very small considering the amount of tissue diseased, and the distortion of the parts much less than if excision had been employed. Any current from 100 volts up is not to be played with, as any leakage might kill. In destroying a small piece of tissue there was always large leakage currents all round the parts. He thought a 200-volt current might cause death in any person suffering from heart disease. He had never heard of the Massey treatment mentioned by Dr. Beckett. If any case were so far advanced as Dr. Beckett described, he did not think any treatment would be of use. With regard to the Röntgen rays and the Finzen light, he proposed dealing with them on some future occasion, and hoped to be able to report numerous cases to them.

The President proposed a vote of thanks to Dr. Fox for his interesting paper, and for opening up a new branch of science and research to the members. He also thanked the visitors for their attendance, and on behalf of the Council he welcomed them, and hoped to have the pleasure of extending a cordial invitation to them when Dr. Fox presented his promised paper on Röntgen rays and the Finzen light. He also would be very pleased if Dr. Webb would read a paper on his experiences in connection with the treatment of cancer.

Dr. McCanah then apologised for not reading his clinical notes on a case of phosphorus poisoning, as Dr. Neild was unable to be present, and had the pathological notes on this case. He would, therefore, hold the subject over until the next meeting.

South Australia.

THE usual monthly meeting was held at the University on 29th May, at 8.15 p.m. Present—Dr. Todd (president), T. K. Hamilton, Symons, Stirling, Bonnin, C. W. Hamilton, Cudmore, A. A. Hamilton, J. A. G. Hamilton, Smeaton, Wigg, Scott, Moule, Sweetapple, Magarey, Jay, Cavenagh-Mainwaring, Reissmann, Poulton, Plummer, Morgan, W. Hayward, G. Hayward, Brummett, Swift, Gault, J. C. Verco, C. Verco, Newland, Harrold, S. Verco, H. Russell, and Gunson (secretary). Visitors—Drs. White and Weld.

Some cases were shown, including one of "Bazin's Disease," by Dr. NEWLAND.

Dr. T. K. HAMILTON exhibited:—

1. *A Tonsillotome*, of Mathieu's newest design, which is in many respects a great improvement on the designer's original instrument.

2. *Schmidt's Aseptic Syringe*.—This instrument is made entirely of metal, piston included, and the connection with the needles is so perfect no washers are required.

3. *Lachrymal Syringe* made by Lüer (Paris) for the exhibitor on the same principle as this maker's ground-glass-piston hypodermic syringe and fitted with platinum points.

4. *Bifocal Lenses*—

(a) Designed by Mr. Köhler, optician, of this city, who has adopted a new method of fitting the two lenses in the frame.

(b) Designed by S. Weeks, of New York, who claims for them certain advantages over any of the other varieties of bifocals.

5. *Spectacles used by Landolt, of Paris*, when operating on the eye, e.g., in operating on remains of the lens capsule or any such thin structure which it is somewhat difficult to see. The glasses are +2.50 D, combined with No. 6 prisms. They are cut out of a large lens and are placed in a frame in the position they originally occupied in this lens.

6. *Spectacles for Irideremia*, suggested by Königshöfer, of Stuttgart. The exhibitor has had this pair made for an albino, who has found the "iris diaphragm," which is the chief feature of the invention, a very great relief in preventing the distressing, blinding effect of sudden increase of illumination on the eye, and his visual faculty has been at the same time very distinctly raised.

7. *Pagenstecher's Celluloid Thread for Surgical Sutures*.

Dr. T. K. HAMILTON also exhibited:—

1. *Two Papillomata*—one removed from the anterior pillar of the fauces and the other from the interior of the roof, the vestibule of the nostril of the same individual.

2. *A Cyst* with perfectly formed and thick walls, which was removed in its entirety from the substance of the faucial tonsil.

3. *A Lymphangioma removed from the interior of the cheek*, measuring 2.50 X 1.25 c.m. The growth presented the following microscopic appearances:—The surface epithelium was very much thickened and hypertrophied above the tops of the papillae, and these latter were somewhat elongated, but otherwise normal. In the submucous tissue a number of large thin-walled vessels—probably dilated lymph vessels—were found.

Minutes of last meeting were taken as read.

A motion "that this Branch should hand over, and does hereby hand over, all responsibility with regard to the carrying out of the 1905 Medical Congress in Adelaide to a special committee," proposed and seconded by Drs. A. A. Hamilton and Jay, was carried.

With the consent of the meeting, the President temporarily withdrew from the chair, which was then taken by Professor Stirling (President-elect of the next Medical Congress), who announced the result of the ballot which was held immediately before the meeting.

Drs. Corbin, Giles, Gunson, J. A. G. Hamilton, Marten, Symons, Todd, J. C. Verco, and Watson were declared elected, with Dr. Poulton (Gen. Secretary) and W. J. Hayward (Treasurer) as the Provisional Committee.

On the President (Dr. Todd) resuming the chair, the following resolution, moved and seconded by Drs. J. A. G. Hamilton and Professor Stirling, was carried:—"That the Provisional Executive Committee elected this evening have the complete control of all matters relating to the Australasian Medical Congress (1905) to be held in

Adelaide, including the election of additional members of the Executive Committee."

BALLOT.—James Andrew Thynne, M.B., M.R.C.S., and Thomas George Wilson, M.B., Ch.M., were declared elected members of the Branch.

It was decided to hold the annual meeting and dinner on Wednesday, June 23, instead of on the following day.

Dr. A. A. HAMILTON read a paper on "A Case of Ulcerative Endocarditis" (see page 315), which was discussed by Drs Mainwaring, Moule, Reissmann, and J. C. Verco.

New South Wales.

THE regular monthly meeting of the Branch was held at the Royal Society's Room on Friday, 30th May, 1902, at 8.15 p.m. Present—Dr. G. E. Rennie, President (in the chair), Drs. Thomas, Grace Boelke, Paul Boelke, R. Jones, Litchfield, Cosh, Hinder, Levy, Mary Booth, Binney, H. Blaxland, Ramsay, Sharp, Palmer, Pockley, Gordon Craig, Morton (Inverell), MacPherson, Geo. Armstrong, Arthur, G. L. O'Neill, Cohen, Agnes Bennett, Gordon MacLeod, Bowman, Furnival, McMurray, Brady, Dick, Kirkland, Jamieson, Newmarch, Maitland, Blackburn, Martin, Ludlow, Ross, Harriett Biffen, Lucy Gullett, Crago, Harold Browne, Sandes, Worrall, Corlette, McKay, H. Marshall, Clubbe, Bennett, Gillies, Dixon, Lloyd, Taylor Young, Paton, Flynn, J. Morton, Megginson, and others.

Visitors.—Dr. Bertha Main (Melbourne), Drs. Windeyer, Moxham, Schalit, G. B. Thomas, Sheldon, Read, Fairfax, Bancroft (Brisbane), Wolfhagen (Hobart).

The minutes of the previous meeting were read and confirmed.

THE PRESIDENT announced the election of the following new members:—Drs. H. Terrey (Kiama), J. F. Lovegrove (Rylstone), J. Park (Helensburgh), R. W. H. Maffey (Newcastle Hospital), T. L. Pawlett (Crookwell), M. L. Cameron (Grafton), E. H. Barnes (Muswellbrook), H. K. King (Nowra), W. Middleton (Mittagong), A. O'Connor (Woonona), J. F. Moffitt (Ballanald). Nominated for membership: Drs. S. S. Shirlow (Balmain), G. H. Smith Hozier (Lismore), F. W. Kane (Nowra), R. B. Stoney (Nowra), A. E. Barcroft (Bowral), F. S. Stuckey (Burwood), F. W. Langton (Redfern), C. J. Kearney (South Grafton), E. R. Roseby (Marrickville), J. L. B. Dixon (Bulli), S. Monti (New Italy, Richmond River), J. S. Milne (North Sydney), M. A. Schalit (Sydney), W. Windeyer (Sydney), Stratford Sheldon (Sydney), Johannes Carl Hein (Walla Walla), Cooper Hardcastle (Hillgrove), W. R. Clay (Hornsby), J. A. Caldwell (Maclean), W. J. Olivey (Millthorpe), E. W. Fairfax (Woollahra), W. H. Read (Sydney).

THE PRESIDENT announced that His Excellency the Governor had intimated his intention of being present at the conversazione in the Great Hall of the University of Sydney, and had fixed the date for Tuesday, 24th June.

Dr. T. S. KIRKLAND exhibited a patient he had treated for deformity of the nose. A photograph had been taken of the girl before the operation, but he was unable to produce it that night. This being the case, the members would have to take his word for it that there had been considerable improvement in the shape of the nose resulting from his treatment. The patient had unfortunately no bridge to her nose. He had found the case somewhat difficult, but had injected the ordinary hard white paraffin with 5 per cent. of vaseline. This he found practicable by lifting up the skin of the nose, and he had filled up the space left vacant. After a time the wax became permeated by the blood vessels, and the improvement was likely to be a permanent one.

Dr. BRADY congratulated Dr. Kirkland on the result of his treatment, which was one to be recommended, as there was no danger in putting it to the trial.

Mr. HANKINS remarked that, as far as he knew, previous to the case before them, there had been only one patient treated by this method in Sydney, and that case had been under his care at Prince Alfred Hospital. In this instance also a considerable improvement in the shape of the nose had been obtained; but as he had injected about four times as much of the composition as Dr. Kirkland had, the organ had taken somewhat the form of a Roman nose. He would like to ask Dr. Kirkland whether any reaction had taken place after the injection, as in his case considerable irritation had followed, and he was afraid an abscess would form; but after a few days the swelling went down, and the patient had experienced no further discomfort. He did not quite agree with Dr. Kirkland's remark with reference to the wax becoming permeated by the blood vessels; he rather thought the paraffin became encapsuled. With regard to the temperature at which to inject, the speaker injected as soon as the knuckle of the finger could be placed in the melted liquid without pain. His method was to use equal parts of paraffin and vaseline, and he recommended the heating of the syringe. The method was one worthy of trial, not only in cases like that shown them that night, but might be employed for cosmetic reasons, as many members were aware, to take the place of certain organs of the body which had been removed by operation.

Dr. ARTHUR asked Dr. Kirkland how he had managed to raise the skin from the bridge of the nose so as to inject the paraffin, as it seemed bound down by a very firm cicatrix?

Dr. KIRKLAND explained that his patient had suffered in no way from reaction. He would, perhaps, advocate the injections being made at two sittings rather than at one. With regard to the temperature, he used the wax at its melting point, at or below 150 degrees, and this produced no irritation on the blood vessels. He had not made any special attempt to raise the skin, but had injected the paraffin beneath it.

Dr. THOMAS moved the following resolution:—"That in the opinion of this meeting any member of the New South Wales Branch of the British Medical Association who meets in consultation with a medical man who by his professional conduct has made himself ineligible to be a member of this Association shall give the fee so received by him for his professional services to the Medical Benevolent Fund." He said that it was with some diffidence he moved the resolution, as he was naturally of a somewhat retiring disposition. There was nothing in the motion that had reference to anything that had taken place in the past. There were some among them who held the opinion that certain members had acted in ignorance with regard to the resolution passed by the Branch in 1898, and he wished that position to be made absolutely clear in the future. The motion, of course, must be understood as not touching in any way the resolution passed in 1898, but that in future no member could plead ignorance of the regulation as to meeting in consultation any medical man ostracised by the Association. He would remind them that in legal matters ignorance of law was no excuse for breaches of the same. The Northern Suburbs Medical Association therefore had asked him to move the resolution to prevent all heart-burning in connection with the question of meeting medical men in consultation who were ineligible for membership of the British Medical Association. He had the privilege of being on absolutely friendly terms with members of this Branch, and he was not there that evening to bring forward a motion in hostility to anyone; the passing of the resolution would effect city

medical men more than those members living in the suburbs; all he desired was to make the position more clear, and his proposal so far from being put forward to take the place of the resolution of 1898, in fact, was a corollary of it. He thought all would agree that the beneficial effect produced by the action of the council had been most marked, and that the profession in New South Wales in consequence was in a far better position than it was in the other States of Australia. They had done much in this direction in the past, but there still remained much to do in the future, and he hoped the motion would be passed unanimously. He concluded by hoping that no consultant would feel aggrieved because it had been thought advisable to bring this resolution before the meeting.

Dr. HINDER, in seconding the motion, wished it every success, and hoped that the Medical Benevolent Fund would be augmented in the way indicated, but thought as it stood it completely nullified the effect of the resolution of 1898.

Mr. HANKINS proposed the following amendment:—"That this meeting of the New South Wales Branch of the British Medical Association endorses the resolution of November 25, 1898, and is of opinion that if, in consequence of a *bona fide* mistake, a member meets in consultation an ostracised practitioner, he should contribute the fee obtained for his professional service to the Medical Benevolent Fund."

Dr. BRADY seconded the amendment.

After discussion, Dr. THOMAS said he would accept Mr. Hankins' amendment.

Dr. PALMER opposed the resolution and amendment on the grounds of their being unnecessary, as whatever had happened in the past, after this discussion there could be no possibility of mistake in the future.

Dr. G. ARMSTRONG supported Dr. Palmer's contention.

Dr. MAITLAND said he had been closely associated with the finances of the Benevolent Fund, and would welcome any additions to its revenue, but it would be a source of extreme regret to him if it received any donation from the source suggested by that resolution. There was one serious defect in the resolution before the meeting, and it was that it left a loophole of escape for any consultant who met a practitioner on the black list: he donates the fee to the Benevolent Fund. The question of fees should not enter into the consideration of their relation with those men who were ineligible for membership of the Branch. What they wanted was not the fee, but that the ostracised men should not be met on any terms whatever. They had been met in the past, but it had been done, he was sure, in ignorance; no one knowing personally the consultant referred to would think otherwise. The ignorance might have been due to want of interest in and want of knowledge of the affairs that concern members of the Branch, and to that extent only was it culpable ignorance. He hoped that the resolution would not pass; it could serve no good purpose; far otherwise, it would be harmful. There was another reason why the resolution should not be passed, namely, they could not enforce the penalty, they could not make any consultant offending in the future denote his fee to the Benevolent Fund. What, then, would be the use of passing a resolution which would leave a loophole of escape for offenders, and which if they did pass they could not enforce?

Dr. JAMIESON moved, as a further amendment, the addition of the following words:—"And further, that such conduct on the part of a practitioner thereby renders him personally liable to the same punishment as the offender met in consultation."

Dr. FURNIVAL looked upon the resolution moved by Dr. Thomas as a futile one.

The amendments and motion on being put to the vote were not carried.

Dr. W. J. S. McKAY read some notes on the following exhibits from the Lewisham Hospital:—(a) Calculus removed from a ureter; (b) Excision of a congenital sacrococcygeal tumour from a woman; (c) Sarcoma of the humerus removed by the interscapulo-thoracic amputation; (d) Excision of the cæcum for malignant disease.

The remaining business was postponed.

COUNCIL MEETING.

THE Council met after the general meeting at the Royal Society's Room on Friday, 30th May, 1902. Present—Drs. Rennie, Brady, Dick, Crago, Hankins, Pockley, Worrall, Hinder, and Jamieson.

THE PRESIDENT stated that Dr. Furnival desired the Council's opinion on a certain matter which he would explain.

Dr. FURNIVAL explained that Dr. Watson, who was medical officer to the A.N.A. in his district, had been appointed as second medical officer to a lodge which he (Dr. Furnival) held, and asked the Council for an opinion as to how he should act in the circumstances.

Resolved—"That the hon. secretary write to Dr. Furnival pointing out that the Council objected to a member holding the position of medical officer to a lodge which employed a medical officer of the A.N.A. on the medical staff."

Queensland.

A MEETING was held on Friday, June 6th, with the following attendance:—Dr. Taylor (Vice-President, in the chair), Drs. Thomson, Lockhart Gibson, Cameron, Flynn, Wiold, Sutton, Hawkes, Culpin, Lightoller, Byrne, Wheeler, Carvosso, Eleanor Greenham, Lillian Cooper, Turner, and Brockway (Hon. Secretary).

A case was exhibited of a man of 21 upon whom an operation for necrosis of humerus was performed 11 years ago, four inches of the upper two-thirds of the bone being removed; the man showed a very useful arm with limitation of abduction, but stated that he was able to do axe-work and navvying with anyone.

Dr. BYRNE exhibited a uterus removed for myoma, which had presented unusual difficulties in the operation.

It was decided not to adopt the Australian Pharmaceutical Formulary sent by the Pharmaceutical Society.

It was decided to support the movement towards the retention of the services of Mr. Bailey, the Colonial Botanist.

THE SECRETARY read a paragraph from the *Courier* with reference to the attitude of the profession towards the Brisbane Associated Friendly Societies' Medical Institute. Some discussion arose as to the question of writing a letter to the lay press correcting the inaccuracies of the paragraph, but it was decided to take no notice of it.

Dr. HAWKES read a paper on "Some Methods and Results in Minor Surgery." (To appear in next issue, with the discussion upon it.)

SUMMERHILL.—The premises occupied by Dr. H. Browne for the last 3½ years will be to let from September 1 next. Situated in Smith-street, and known as "Lethington," containing nine rooms and out offices, coach-house, stable, man's room. Land, 100 feet x 300. Particulars, C. Fowler, Young-street, Croydon.

CORRESPONDENCE.

Victoria.

(FROM OUR OWN CORRESPONDENT).

Pollution of Saltwater River — The Women's Hospital Dispute—Death from Chloroform—Medical Defence Association of Victoria—Dismissal of Medical Officers of Country Hospitals.

SEVERAL letters have appeared in the *Age* lately as to the pollution of the Saltwater River. It is stated that this river is a scandal to the whole community, and that the law is quite strong enough to prevent its condition, but that the inspectors are either blind or incompetent, and should be replaced by others, who would not fear to do their duty. During the late floods, for hours the river ran black and thick as pea soup, and the smell was dreadful; and then the natural silt came, and for a few weeks after the water was quite clear and clean. Now once more viscera and filth are beginning to float about, and each day takes away some of the good done by the flood. This river is far superior to the Yarra in many respects, and should be a source of delight to fishermen and boating parties. It is also navigable for crafts of considerable size some miles above the junction with the Yarra; but all this is destroyed in the interests of a few slaughter-yards, and the whole district contaminated with horrible smells and a deposit of disgusting filth on its banks. Sydney has had to pay dearly for like neglect, and it is quite time that the Government insisted that the health of thousands should not be endangered by the neglect of inspectors and interested parties.

There is nothing new to report in connection with the Women's Hospital and its unfortunate mismanagement. The committee have been advertising for a junior assistant for the obstetric department during the month of April, but did not receive one reply up to the 1st of May. Notwithstanding the muddle to which the committee have reduced the management, they are still as antagonistic to the staff as before. Dr. Cuscaden, who has recently been appointed a member of the committee, moved at the first meeting he attended that a sub-committee should meet a sub-committee of the united staff to alter rules that were obsolete. He was asked to give notice of motion for the next monthly meeting, not expecting any opposition from the committee. When the matter came up on the 16th, Colonel Goldstein said he was opposed to the motion, as he could not recognise a united staff in the Women's Hospital, and he moved as an amendment that a sub-committee meet the infirmary staff to consider the rules. Dr. Cuscaden considered Colonel Goldstein's amendment a mere quibble, and that it would not have a tendency to heal the breach between the staff and committee. The amendment was carried, only four voting for Dr. Cuscaden's motion. The only possible hope for the termination of the present unsatisfactory state of affairs is for the committee to call the subscribers together and place their resignation in their hands. The committee are apparently "spoiling for a fight"; at least it seems so, judging by their actions. At the last meeting of this remarkable body a motion was carried asking the chairman of the honorary medical staffs if there was any breach between them and the committee. This, notwithstanding the fact that they find it impossible to fill the resident medical officers' positions, and can only carry on with a lady at the salary of £250 per annum, who has been out of practice for some years, and by creating a new position of honorary assistant medical officer, filled by a gentleman whom the State Government pensioned off as not fit for further work.

The teaching as at present carried out is such as to force the Medical Students' Society to make complaint.

Another death has occurred in the Melbourne Hospital from chloroform, the patient being a clerk, aged 47 years. At the inquest, the quality of the chloroform (Duncan and Flockhart's), and the ability of the resident medical officer to administer it, was gone into. Owing to kidney disease it was considered that ether was not suitable for this case. The chloroform was given on a mask with every care; but it was brought out in evidence that the doctor had not had much experience in the administration of chloroform, as he had only lately been appointed a resident of the hospital. It was proved that only 60 minims of chloroform had been used, and that 10 minutes had been occupied in giving this small quantity. The Coroner in summing up thought it would be better if possible for two medical men to watch the administration of anaesthetics, particularly when new residents were appointed to a hospital. He did not consider the doctor careless, but he thought an ounce of experience was worth a ton of theory. The jury found that deceased died in the Melbourne Hospital from chloroform poisoning, that the chloroform was administered with reasonable care, and that they were of opinion that two doctors should be present when chloroform is being administered.

The quarterly report of the Medical Defence Association of Victoria has been published, and the membership roll is rapidly on the increase. A list of medical men who are not members of the association is also given with the idea of getting all the reputable members to join in mutual defence. There is no doubt that more would join if the council of the Defence Association had a little more enterprise. They seem afraid to move even in such a momentous question as a wage limit until they are satisfied that they have a larger members' list. It has been suggested that a plebiscite be taken of all the medical practitioners of the State to test the feeling of the profession with regard to this matter, and it is to be hoped that the Defence Association will take up the idea.

Several cases have occurred lately in which medical officers of country hospitals have been dismissed at very short notice without any reason being given or obtainable. This is a great injustice to the medical men in question, and it should be the part of all their professional brethren to see that they obtain a fair hearing and justice. One case occurred at Balranald (New South Wales), and the other at Queenstown (Tasmania), and as far as can be ascertained, in both cases the medical men have been treated with scant courtesy, and almost ruined financially. Committees of hospitals, as we all know, are made up of all sorts and conditions of men, in many cases actually deriving business benefits from their connection with the hospitals, and some of them not at all particular as long as their own selfish ends are obtained. This ought not to be, and there should be some redress for medical men against the ill-will of such people, and some association of our profession should take this matter up and see it through to the end.

Tasmania.

(FROM OUR OWN CORRESPONDENT.)

THE Intercolonial Medical Congress of 1902 is now a thing of the past—a gathering enjoyable, it is hoped, from the point of view of our visitors from the sister States, a much appreciated one certainly by the Tasmanian profession, appreciated not only because of the

old friendships renewed, the new ones formed, but because of the work done, the views broadened, the lessons learnt. In the absence of post graduate courses, and constant hospital experience, the Congresses do much to rub off the rust in some of us, and the pity is that they do not come often enough to prevent a fresh accumulation thereof.

"Bruni," the well-known correspondent of the *Australasian*, writing on the absurdity of some of the quarantine regulations for cattle in Tasmania, mentions tuberculosis as existing in the herds of the State. The medical officer of health for Launceston, Dr. Wilson, has been for years condemning carcasses on account of tuberculosis, and states that tubercle, although not so frequent as formerly, is still of common occurrence at the slaughter yards.

The trouble is that in public health and hospital matters we want capable skilled advice and administration, not the unscientific methods and lay administration which have been so long in vogue here. Considering the large amount of public money which is spent annually in these departments, it would be a step in the right direction to appoint as Government medical adviser a strong man, who should be given extensive administrative powers.

Representatives from the A.N.A. of Victoria have been touring the colony canvassing for members. It is to be regretted that any medical men have shown themselves short-sighted enough to become associated with a society which is responsible for sweating the profession in Australia.

Some time ago the lady superintendent of the Launceston Hospital sent a paper to the *Nursing Record*, in which certain statements were made touching the training of nurses at the Hobart Hospital. The committee of the Hobart Hospital asked the committee of the institution for an apology and retraction by their lady superintendent. A half-hearted kind of apology was tendered, but no public withdrawal of the statements complained of. The Hobart authorities naturally feel somewhat indignant, and think, with some reason on their side, that the Launceston Hospital might set its own house in order before commencing to pick faults in those of its friends.

Queensland.

(FROM OUR OWN CORRESPONDENT.)

Medical Defence Society and Publication of Names of Plague Patients—The Brisbane Hospital—Appointments at the Hospital for Sick Children—Death of Dr. Wray.

THE Medical Defence Society has been successful in obtaining from the authorities the suppression, from the lay press, of the names of patients suffering from plague, and also the names of the medical men notifying such cases. One thinks that a similar action might be attempted in other places where plague is prevalent.

The management of hospitals by committees consisting entirely of commercial gentlemen, or of laymen, is certain, sooner or later, to result in dissatisfaction. The Brisbane Hospital is so managed. There also exists a medical board, composed of the honorary members of the staff, and of the (paid) resident staff, with the Medical Superintendent as secretary. The purpose of a medical board, one imagines, should be to give advice upon all purely medical matters, such as, for instance, the appointment of resident medical officers and of honorary officers when vacancies occur or occasions for additions to the staff arise. The advice of the board is not asked on these points. At present, one honorary medical

officer serves the departments of the eye, ear, throat, and nose. Such an arrangement cannot be otherwise than unsatisfactory, and except by the expenditure of a very large amount of time by the practitioner holding the appointments, inefficient. It should be the duty of the Medical Board to take action for the alteration of such an arrangement, and such would, doubtless, have been done had there been a reasonable prospect of success. At present, an ancient rule limiting the number of the honorary staff stands in the way; this might surely be amended if necessity were recognised. There is no anaesthetist, as such, connected with the Hospital. It would be interesting to know if at any other hospital of similar size such a condition of omission exists. There are three medical officers to out-patients (excluding two who act in connection with the South Brisbane Dispensary, which is a branch of the Hospital), who visit the Hospital on two days of the week each, and attend to such patients as are portioned out to them by a clerk. Such do not include surgical cases, which are served by the Medical Superintendent, nor gynaecological cases, which are treated in a special department, as, of course, they should be, and are also served by the Medical Superintendent. This arrangement is, one thinks, the result of a serious misconception on the part of the managing committee, who cannot be expected to know orthodox methods of hospital service unless they are taught and are anxious to learn. If there be the necessity for an out-patient service by honorary medical officers, and none can gainsay that, there can be surely no good reason why this service should not include the departments of surgery and of gynaecology. It cannot be said that there would be a difficulty in obtaining medical men to do this work, for no attempt has been made by advertisement or otherwise to do so. There is a gynaecologist for in-patients, and the remaining members of the in-patient honorary staff are entitled by the rules to receive gynaecological cases into their beds, and to operate. This applies to the physicians as well as to the surgeons. The arrangement of the medical beds is peculiar. The senior honorary physician has charge of all cases of typhoid fever, and of practically all acute cases. The number of his beds is equal to, if not greater, than the united number of those of the other two honorary physicians. In the event of a vacancy occurring in the honorary surgical staff, the senior honorary physician is offered the appointment, the second and third honorary physicians "move up one," and the senior medical officer to out-patients moves inside. The vacancy thus caused in the out-patient staff is filled at the sweet will of the managing committee, without advertisement for applicants, and the practitioner who is given the appointment, may, or may not, be a relative of a member of the committee. It is perhaps natural that a junior member of the profession should take a greater interest in operative surgery than in medicine, but when a young man is appointed to the medical side of a hospital he should, one thinks, tear himself away from the operating room when the honorary physician of his wards is going round. There should be no necessity for other assistance at any operation than that of the house surgeon of the cases, and of nurses, with that of the Medical Superintendent when specially skilled help is required. The house physicians should not be required for anaesthetic or other purposes. The Medical Superintendent, one thinks, should exercise complete superintendence over the hospital and the details of its management; he should see out-patients only with a view to relieving the honorary medical officers of trivial cases, and of apportioning the others to their respective places; he

should surely not have complete control of any one department; he should be at the call of the resident staff in every emergency, and should take the place of members of the honorary staff when the latter are unavoidably or unexpectedly absent, even should this involve the performance of an arranged major operation. At the time of the foundation of the Hospital for Sick Children there was a strong feeling among a portion of the profession in Brisbane that the principle of life appointments on the honorary staff of hospitals was neither equitable nor wise, and the rules of the Children's Hospital were arranged to obviate this by making the appointments tenable for three periods of three years each. The nine years of possible service expired at the beginning of 1902, and the honorary staff realised that unless some alterations were made in the rules which they had themselves inspired they would have to relinquish their appointments in favour of their junior colleagues. Advantage was taken of the necessity for the revision of the hospital rules so as to include rules for the matron, and changes in the rules for nurses, and a sub-committee of three members of the honorary staff was appointed to revise the rules. This sub-committee advised that the time of service on the honorary staff be extended to three periods of five years each. Two of the honorary staff, however, recognising that they had fulfilled the terms of the original rules, retired. Two of them elected to regard the new rules as retrospective, and have retained their positions—positions which they can now hold for six more years. One other resignation resulted from this, namely, that of a medical man who had joined the staff in the belief that the vacancies occurring at the beginning of this year would give him his step. He is disappointed and annoyed, and one thinks with reason. Juggling of this nature should surely be absent from the deliberations and decisions of gentlemen of the medical profession. Dr. Hardie, having served for nine years, has retired from the staff of the Children's Hospital, and Dr. Lockhart Gibson, on the same grounds, has retired from the position of hon. surgeon in the department of the nose, ear and throat. Dr. Hopkins has resigned his position on the staff.

The death of Dr. Wray came as a great shock to his many friends. His health had been indifferent for some time, and he had only recently returned from a long holiday taken in order to obtain necessary rest. Under a bluff manner, he concealed the kindest of natures, and the large number of members of the medical profession, and of others of all conditions of life who attended his funeral, testified to the affection and esteem with which he was regarded by all classes. It will be difficult to obtain the services of a medical man as well qualified as he was to fulfil the varied, difficult and unpleasant duties of the position of Government Medical Officer. Meanwhile Dr. A. J. Turner has been appointed to act, Dr. Espie Dods, who has formerly acted as *locum tenens* for Dr. Wray, and was doing the work during Dr. Wray's illness and at the time of his death, having been for some inscrutable reason overlooked. To work diligently, faithfully and successfully does not always bring the expected reward—in this State—for if any medical man deserved well at the hands of the State, one would imagine that Dr. Espie Dods did. He went with the first contingent to South Africa, and by his skill and courage obtained honour among his fellows, but received no "honours." Do not put your trust in potentates, but flatter them all you know, even to the licking of their boots; only so can you expect to get grants and obtain office. Eheu!

OUTLINE OF A SCHEME FOR THE REORGANISATION OF THE NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

(To the Editor of the Australian Medical Gazette.)

SIR,—Any scheme which will in any way help to strengthen the efficacy and power of our Branch will, I feel sure, be acceptable to the members thereof.

At the present time we are engaged in a struggle with a hybrid friendly society known as the Australian Natives' Association, and already the membership of our Association has enormously increased.

Although at first it rather looked as though the fight was going to be a most severe one, yet, I think, in the light of subsequent events, we are justified in regarding the appearance of this society as a blessing in disguise.

For years past many of us felt that a good solid increase in our membership would be most beneficial, not only to ourselves, but also to the general public.

If we can in any way do more to increase and consolidate our forces, we will, I feel sure, place the profession of medicine in this colony in a much more satisfactory state, and establish a more thorough feeling of *esprit de corps* among both our country and metropolitan members.

For some time past I have given a good deal of thought to this subject, and I have elaborated a scheme which, I venture to think, will meet the difficulties in the way.

Briefly stated, the objects of my scheme are:—

- (1) To increase the inducements to the country practitioners to join us.
- (2) To increase the power and influence of the British Medical Association, both with the public and the profession.
- (3) To throw into *direct* opposition those members of the profession who are not prepared to abide by the time-honoured and reasonable practices of honest medical men.

You will, I feel sure, Sir, agree with me that any scheme which can even partially attain these ends can only work for good.

For the sake of argument, let us suppose that the membership of the Branch is 500, and that the governing body be one of 10 (*i.e.*, one representative for every 50 members).

Let us next suppose that the State of New South Wales, as regards its medical population, is divided into five parts, and that of the members of association 300 are practising in the metropolitan area and 200 in the country districts.

This being so, the metropolitan would return six and the country four members to the council.

I would next suggest that at the end of each year the out-going council should issue to the members throughout the State, not only a statement of what has been done during the year of their office, but briefly outline their views on the subjects at the time under the notice of the profession.

Each of the four country (district) branches would then have the opportunity of nominating and electing a member to represent their views. At the same time the country members might, through the secretary of their district branch, invite some member of the profession living in or near the metropolis to represent them on the council.

The members of the district branches would also, at stated times, be able to meet socially and help to encourage that feeling of *camaraderie* so essential to good and honest practice.

Some may think my scheme too Utopian, and some may think it impracticable, so I submit it to you, Sir, hoping that discussion upon it may ensue in the columns of the *Gazette*.—I am, Sir, yours, etc..

June 2nd, 1902.

SYDNEY JAMIESON.

CONSUMPTIVE HOSPITAL AT KURING-GAI-CHASE.

(To the Editor of the *Australian Medical Gazette*).

SIR,—As a recent arrival from England, and one who is keenly interested in the care and treatment of consumptives, permit me to express my surprise and indignation at the attitude adopted by residents—led, I regret to see, by members of the medical profession—on the Hornsby line.

Angry meetings are taking place at the various centres, and the reports of these meetings, along with verbose communications from secretaries of progress associations and other correspondents, are appearing almost daily in the columns of the lay press.

Fresh from the old land, and with vivid recollections of the enthusiastic meetings held and eloquent addresses delivered throughout the length and breadth of the country in favour of the establishment of these sanatoria, I cannot understand the mental condition of any duly qualified medical practitioner moving a resolution that "the establishment of the hospital would be seriously detrimental to the health of the people."

"Tis an old saying that doctors differ; but with all due respect to these doctors, whom I have not the honour to know, I would, as an ignorant layman seeking information, ask them how they reconcile their words with those of such an eminent authority as Professor Crookshank, of London. This famous bacteriologist is at present in Australia, and during the course of an address recently delivered in Brisbane he stated (I quote from the daily press) that "there was not a shadow of foundation for the theory that there was danger to the inhabitants of a township if a sanatorium was erected in the neighbourhood."

Particular stress was laid upon the fact that "those unfortunates would travel on the trains to the hospital." I have yet to learn that consumptives do not now travel by any train, in any class, and in any compartment. And yet these doctors have never once, I make bold to say, raised their voice in public protest against the danger of consumptives travelling by train. Perhaps they avoid risk by invariably travelling in a pre-engaged, previously sterilized compartment! Do they ever use a "sleeper," and, if so, do they have the curtains and general upholstery well "formalined" before retiring to rest?

Let these leaders of the people, on matters medical, on the North Shore line be consistent, and act accordingly. Do they think that the general good will be better served by leaving "those unfortunates" to their fates in their insanitary surroundings dotted here and there throughout your large centres, rather than by having them in a suitable building in a suitable district, and under skilled supervision? Most emphatically, but respectfully, I say no! I have visited these sanatoria and know how they are conducted, and if it were for no other reason than the educational influence, in hygiene, impressed upon these patients, I would strongly recommend the erection of the hospital. I am not qualified, and therefore am unable to touch on the medical benefits.

I have written to you rather than to the lay press with the double hope of more quickly reaching these medical men, who have already spoken, and of inducing some of their brethren to lead them back to the paths of truth and up-to-date facts.

I am, etc.,

Sydney, 2nd June, 1902.

PRO BONO PUBLICO.

PERTH PUBLIC HOSPITAL APPOINTMENTS.

(To the Editor of the *Australasian Medical Gazette*.)

SIR,—I wish to inform your readers of the manner in which the Perth Public Hospital elect medical men to their staff, so that when they see a correspondent from here signing himself senior surgeon this or senior surgeon that they will be able to know how much value to attach to such honorary appointments, the more so as medical practitioners in the Eastern States often refer patients coming here to these so-called senior men. The Hospital Board are nominated by the Government, there being no subscribers as in the other colonies. Once every year half the staff retire, and hitherto the vacancies thus occurring have been advertised in the local press, so that the outside medical men may have an opportunity of applying; but it is a significant fact that since I and other gentlemen turned up in Perth with the F.R.C.S. these vacancies were not advertised as usual, and the first intimation we had of knowing that vacancies had occurred was an announcement in the *Government Gazette* that the four retiring men were appointed to the vacancies. In the language of Mark Twain, "Nuff sed."—Yours faithfully,

E. J. A. HAYNES.

390 Hay Street,

Perth, Western Australia.

The British Medical Association and its Colonial Branches.

We have been requested by the Queensland Branch of the British Medical Association to publish the following letter:—

[COPY.]

December 7, 1901.

To the Secretary of the Council,
British Medical Association,
Strand, London.

SIR,—At a meeting of the Association, held in Cheltenham in July, it was, I understand, decided that a committee should be appointed to consider the organisation of the Colonial and Indian Branches, and their relation to the Association. I had intended to lay the enclosed letter from the Secretary of the Queensland Branch, which has reached me since the Cheltenham meeting, before this committee. As my early departure from England will prevent me from doing this, I will ask you to kindly forward the said letter to the committee when it meets.

Perhaps I may be allowed to add a few comments on the proposed constitution from an Australian standpoint. I must first state that, in so doing, I am expressing my own views, without having had the opportunity of laying them before the branch which I have the honour to represent.

I do not desire to dwell on minor points, which are, however, in themselves important, and I would frankly acknowledge that in the proposed constitution a genuine effort has been made to meet the wishes of the Australian branches. The basis of the constitution is the proportional representation of the various branches, or of their divisions; and the main difficulty, which I believe to be insurmountable, is that in no such scheme can the Australian branches receive adequate representation. It is not only that their representatives must constitute an insignificant minority of the Council: a still graver difficulty is that it will be, except by the rarest accident, impossible for them to have a really genuine representation in the Council at all. For a genuine representative should, I submit, (1) be a resident of the district represented, and thoroughly in touch with its special needs

and difficulties, and (2) should be recognised by his election from many possible candidates as a leading practitioner, and one possessing the confidence of at least the majority of the medical men of the district, and so able to speak for them with authority; and not merely a chance visitor to Europe for a few months, like myself, for example.

I hope, therefore, as the only way of meeting these difficulties, that provision will be made within the limits of the constitution for the future formation of a local Council elected by the Australian branches, to have full jurisdiction over matters affecting these branches, subject, of course, to the fundamental laws of the Association. Some such federation of the Australian branches is much needed, and I do not think it can be long delayed; and it would, I am convinced, do nothing to weaken, but much to strengthen, the ties which bind these branches to the British Medical Association, a union which, I hope, may never be dissolved.

It is not irrelevant to remark that it is no longer correct to entitle the Australian branches "Colonial branches." What used to be known as the Australian Colonies are now States of the Australian Commonwealth. I have the honour to be, Sir,

Your obedient servant,

A. JEFFERIS TURNER, M.D.,
Representative on the Council of the Brisbane and
Queensland Branch.

HOSPITAL INTELLIGENCE.

Quirindi Hospital, N.S.W.—A new ward, to be known as the "Mafeking Ward," was recently opened by the Minister for Works (Mr. O'Sullivan). The president of the hospital stated that all the buildings connected with the institution had been erected free from debt, and there was a good credit balance.

Launceston Hospital.—There were remaining in the hospital on May 1, 52 male patients and 39 female; since admitted, 24 males 17 females. Nineteen males were discharged, and nine females, while amongst the latter there had been one death. There remained 103 patients on May 15. The number of in-patients treated during the month of April was 164, as against 186 last year; out-patients, 584, as against 437. In the dental department 109 cases were treated.

Camden Cottage Hospital.—This hospital was formally opened by the Hon. J. See, State Premier, on May 24. It has been erected and equipped at a cost of £2,300, to which a grant of £500 has been received from the Government, whilst the remainder has been chiefly subscribed by the residents of Camden. At the present time only a small balance remains unpaid. There are two large general wards, also a detached building for patients suffering from infectious diseases. At the conclusion of the ceremony a collection was taken up, and a sum of £150 was subscribed.

Hospital for Infectious Diseases, Melbourne.—Nearly five years have elapsed since the people of Melbourne subscribed some £20,000 to build a hospital for infectious diseases, which would also commemorate Queen Victoria's Diamond Jubilee. That hospital, at last, after many vicissitudes, approaches completion. Recently the furnishing stage was reached, and a sub-committee met at the Town Hall and considered the purchase of 40 bedsteads.

Benevolent Asylum, Melbourne.—Sickness is very prevalent amongst the 700 inmates of the Benevolent Asylum at present. At a recent meeting of the committee the superintendent, Mr. A. E. Laver, reported that there were 367 inmates receiving

medical aid, as against 252 at this time last year. In the circumstances it was decided not to give effect to the determination to amalgamate the positions of resident medical officer and dispenser at present.

Proposed Consumptive Hospital for Sydney.—A deputation of members of the medical profession, consisting of Drs. P. Sydney Jones, Jamieson, Purser, and Wilkinson, waited upon Mr. T. Waddell, M.L.A. (State Treasurer), at the Treasury, for the purpose of urging the Government to take action in connection with granting a site for the erection of a hospital for patients suffering from consumption in its later stages. Dr. Sydney Jones explained the necessity for providing a special hospital for consumptives in the last stage of the disease. Mr. See had promised to put a sum upon the Estimates for this purpose. A site had been inspected which was eminently suited for the purpose. The land in question was Crown land, about 50 acres in extent, and situated about a mile from Hornsby, on the Newcastle side. Mr. Waddell said he would personally forward the matter in the interests of humanity. He saw no difficulty with regard to the land, and had no doubt that the Premier would place the sum on the Estimates for the erection of the building.

UNIVERSITY INTELLIGENCE.

University of Sydney.—At the last meeting of the Senate, on the recommendation of Professor Wilson, Dr. J. C. Windeyer was appointed an additional Honorary Demonstrator in Anatomy. On the recommendation of the Dean of the Faculty of Medicine, the following examiners were appointed for the conduct of the forthcoming final examination for the degree of Bachelor of Medicine:—Medicine, Dr. Macdonald Gill; surgery, Dr. Hankins; midwifery, Dr. McCulloch; gynaecology, Dr. Fourness Barrington; clinical medicine, Dr. P. Sydney Jones; clinical surgery, Dr. T. Fiaschi; psychological medicine, Dr. Eric Sinclair; ophthalmic medicine and surgery, Dr. Odillo Maher; medical jurisprudence and public health, Dr. Armstrong. The following were appointed additional honorary dental surgeons at the University Dental Hospital:—Messrs. W. H. Weston, M.D., D.D.S.; Adin Parsons, D.D.S.; A. R. Marks, L.D.S., D.D.S.; and P. R. Reading, L.D.S.

A vacancy has occurred in the University of Melbourne Council through the expiration of the term of office of Dr. John Williams.

MILITARY INTELLIGENCE.

COMMONWEALTH.

LIEUTENANT GEORGE LAWALUK BELL, Captain Douglas Andrew Shields, Lieutenant George Alexander Webster, and Lieutenant Walter James Healey have been appointed medical officers respectively to the 5th, 6th, 7th, and 8th Battalions, Australian Commonwealth Horse, for service in South Africa.

NEW ZEALAND.

New Zealand Volunteer Medical Staff.—Walter Robert Graham to be Surgeon-Captain. Commission to date from 18th March, 1902.

Surgeon-Colonel Thos. Burns, who saw service with the First and Sixth Contingents, has medical charge of the Tenth.

Home, George, to be Surgeon-Captain.

REVIEW OF CURRENT MEDICAL LITERATURE.

SURGERY.

The Surgical Treatment of Obstruction in the Common Bile-duct by Concretions.

Mayo Robson (*Lancet*, April 12, 1902) describes a modification of the operation of choledochotomy as performed by him, illustrated by 60 cases. When once gall-stones have reached the common duct their attempted dislodgment by purely medical means is, with few exceptions, disappointing in the extreme, and the unfortunate patients are condemned to a lingering illness, usually ending in death, unless the obstruction can be removed by surgical intervention. No surgeon should attempt the removal of gall-stones unless he is prepared for any of the various operations on the biliary passages, as it is almost impossible to say beforehand what may be required until the ducts have been explored by the fingers, and no operation should, as a rule, be concluded until it is clearly made out that the ducts, including the hepatic and common ducts, are quite free from concretions. The author finds from an experience of some hundreds of cases that the common bile duct has to be attacked in one out of every five or six cases. In 10 cases Robson has been able to work a stone back into the gall-bladder. The attempt to push it into the duodenum is inadvisable, as it may be pushed into the diverticulum of Vater, and so be missed, and the operation rendered futile. The author has not attempted to crush a concretion, nor to perform cholecyst-enterostomy during the past two years. The operation of opening the duodenum, as suggested by McBurney, he considers more difficult and more dangerous than choledochotomy. Of the ideal operation choledochotomy, Robson says he has been able, as the result of his experience of 60 cases, to modify the operation in such a way that what was formerly a most difficult procedure, involving prolonged manipulation, special appliances, and at least two assistants, is now a comparatively simple operation, in the greater number of cases only requiring the help of one assistant, and not requiring the use of any special apparatus. The time of performing the operation is reduced to 30 or 40 minutes where the adhesions do not give unusual trouble. He places a firm sandbag under the back opposite the liver, which not only pushes the spine and with it the common duct forward, so that it is several inches nearer the surface, but acts like the Trendelenburg position in pelvic surgery by letting the viscera fall away from the field of operation. He makes a vertical incision over the middle of the right rectus and separates the fibres with the finger, which he finds the most effective way of exposing the gall-bladder and bile ducts; and when necessary to open either the common duct or the deeper part of the cystic duct, he carries the incision upward in the interval between the ensiform cartilage and the right costal margin as high as possible, thus exposing the upper surface of the liver very freely. By lifting the lower border of the liver in bulk, the whole of the gall-bladder and the cystic and common ducts are brought quite close to the surface. The assistant can keep the parts well exposed by making traction on the gall-bladder with his right hand, while he retracts the left edge of the wound and the viscera with his left hand and a sponge. It will be found that an almost straight passage exists from the gall-bladder through the cystic and common duct to the duodenum, and if the adhesions

have been properly separated the surgeon has immediately under his eye the whole length of the ducts with the head of the pancreas and the duodenum. The surgeon, whose hands are both free, can now with his left finger and thumb so manipulate the common duct as to render prominent any concretions, which can be cut down on directly, the edges of the opening in the duct being caught by pressure forceps. The bile, which usually flows freely on incising the duct, must be quickly wiped up with sterilized gauze pads, and a sponge placed in the kidney pouch. After removing all obvious concretions, the fingers are passed behind the duodenum and along the course of the hepatic ducts to feel if any other gall-stones are hidden there, and a gall-stone scoop is passed quite up into the primary division of the hepatic duct in the liver, and quite down to the duodenal orifice of the common duct. The incision in the bile-duct is closed with a continuous catgut suture by means of an ordinary curved round needle. Where the pancreas is indurated and swollen from chronic pancreatitis a drainage tube is inserted directly into the tube, and stitched in with catgut; in other cases a drainage tube is stitched into the fundus of the gall-bladder. A gauze drain through a split drainage tube is generally inserted, and either brought out through an incision in the loin or by the side of the gall-bladder drain. The wound is closed in layers by continuous catgut sutures. To lessen the risk of hæmorrhage, 30-grain doses of chloride of calcium are administered by the mouth for a few days before the operation, and 60-grain doses thrice daily by the rectum after the operation. Robson has performed 21 successive choledochotomies without a death, and his mortality since June, 1900 (68 cases), is 5.5 per cent.

The Technics of Nephropexy.

Edebohls (*Annals of Surgery*, Australasian edition, March, 1902) very fully discusses the above as an operation *per se*, and as modified by appendicectomy and lumbar exploration of the bile passages. Within the last three years decided modifications, or rather amplifications, of the technics of nephropexy have been called for by increasing knowledge concerning the relations between movable right kidney, appendicitis, and diseased conditions of the gall-bladder. The relations of movable right kidney to appendicitis have demonstrated the necessity of removing the vermiform appendix in many patients who need operative fixation of a loose right kidney. The simultaneous removal of the diseased appendix and anchoring of a loose right kidney through the same lumbar incision appears a natural corollary. Many operators have now fallen in with the view first expressed by the author in 1895, and now remove the appendix at the same time as fixing the kidney. Lumbar appendicectomy is performed by opening the peritoneum to the outer side of the ascending colon. The appendix is found by following the longitudinal muscular bands to the cæcum, where they join at the root of the vermiform process. The latter is delivered into the wound, and either inverted entire into the caput coli—after tying off the meso-appendix—or else amputated, and the stump treated according to the predilection of the operator. The author has failed four times out of 56 cases in his attempt to remove the appendix through the lumbar incision. (The lumbar route is never indicated for the removal of the appendix except when associated with nephropexy.) Clinical and post-mortem observations, as well as experience gained at the operating-table, point to the associations existing between right movable kidney and diseases of the bile passages, cholelithiasis, cholecystitis, etc. (Numerous instances are quoted where different operators have found the two conditions associated.) Edebohls objects

to the classification of nephropexy as a minor operation, and thinks that a properly-performed nephropexy is a more difficult operation than nephrectomy. After discussing very fully the different incisions and methods of fixation that have been in use, and the complications and accidents that may occur, the author describes very clearly his present method of performing the operation:—The patient is placed in the prone position with a large air cushion underlying and supporting the abdomen. Make a straight incision along the outer border of the erector spinæ from lower border of last rib to crest of ilium. Separate the fibres of the latissimus dorsi from each other over the outer border of the erector spine without opening the sheath of the latter. Split the transversalis fascia and expose the perirenal fat. Draw the ilio-hypogastric nerve to one side. Open the sheath of the quadratus lumborum from rib to ilium along the anterior aspect of the lateral border. Free the kidney as far as necessary by blunt dissection with the fingers. Deliver the kidney with its fatty capsule through the wound on to the back. If more room is needed, nick a few of the outer fibres of quadratus near its iliac insertion. Dissect off and remove the whole of the fatty capsule. Explore by palpation the kidney, its pelvis, and the upper end of the ureter. If removal of the appendix be indicated, open the peritoneum to the outer side of the kidney, replace the kidney temporarily in the abdomen, draw out the ascending colon, and follow one of the longitudinal bands to the root of appendix. After replacing the intestines, explore by palpation the duodenum, common bile duct, cystic duct, gall-bladder, under surface of liver and pylorus—all of which are easily reached through the lumbar incision. Close the peritoneal wound by suture and again deliver the kidney to prepare it for anchorage. Nick the capsule proper of the kidney near the middle of the convex border just sufficiently to admit the tip of a grooved director. Pass a director, and on it divide the capsule proper along the entire length of the convex border of the kidney to half-way around both the upper and lower poles of the organ. Separate the capsule proper on each side by blunt dissection to half-way between the convex border and the pelvis. Resect a portion of the detached capsule if too redundant. Pass four suspension sutures of 40-day catgut through both the reflected and the still attached capsule proper close to their line of junction, one at the middle of the upper and one at the middle of the lower half of the organ on each surface. Each suture is passed through the reflected capsule, close to the line of reflection, then is passed under the attached capsule, in the long axis of the kidney, for two or three centimetres, and then passed back through the reflected position of capsule. A Hagedorn needle, with the broad surface running flatwise, is recommended. Pass the kidney, with the eight free suture ends hanging from the capsule, back into the body. Pass each suture end in succession through the abdominal parietes from within outward, four to the inner and four to the outer side of the incision, each suture piercing the tissues at a distance from its fellow of the opposite side, equal to the antero-posterior thickness of the kidney. The sutures to the inner side of the incision will pierce the retracted sheath of the quadratus near its edge, the quadratus itself, and the erector spinæ; the outer sutures will traverse the transversalis fascia and the latissimus dorsi. Leave the sutures untied for the present. Close the wound of the muscles and fascia by from four to six interrupted sutures of 40-day catgut, passed in such a manner as to turn the raw surface of the quadratus towards the kidney. Gently draw taut the eight ends of the fixation sutures so as to bring the denuded surface of the kidney into contact with the raw

surface of the quadratus, and tie the two ends of each of the suspensory sutures to each other. Bury the suspension and muscle sutures by closing the skin over them with the intra-cuticular suture. Apply the dressings across the entire width of the back, remembering that the patient is to lie upon them for a week before changing. A table of 846 recorded nephropexies by various operators is given with 14 deaths, or a mortality of 1.65 per cent. The author has been able to follow up a great many of his cases—some as long as eight years and three months after operation, with the result that nearly all of them had remained fixed. The original contribution is very fully and clearly illustrated by drawings and photographs.

Temporary Closure of the Carotid Arteries.

Crile (*Annals of Surgery*, Australasian edition, May, 1902) contributes a paper on an experimental and clinical research on the temporary closure of the carotid arteries. Hæmorrhage being one of the greatest dangers in operations on the head and neck, and being also a source of pneumonia through the inspiration of blood into the pulmonary tract, has caused various operators to practice temporary occlusion of the carotids by ligature or clamp. The permanent closure of the external carotids is justifiable, but in the case of the common and internal carotids it is otherwise. Wyeth's tables show that the mortality from cerebral complications alone amount to 11 per cent. Of 789 cases, 49 developed hemiplegia, besides imbecility, delirium, and convulsions in 19 others. In the experimental part of the research 19 dogs were submitted to experiment. The histologic appearance of arteries clamped for from 15 minutes to half-an-hour showed little effect other than a slight tearing of the endothelium; those clamped for an hour showed a greater amount of distortion of the endothelium. The amount of pressure exerted by the clamp, and the presence or absence of wound infection, also modified the results. The blood pressure was increased by the closing of one carotid, and much more so by closing the two; but compensation soon took place. The circulation through the clamped portion was readily re-established after the clamps were removed, even when they had been allowed to remain on 24 hours. The most useful clamp is so constructed that the blades can be adjusted by means of a set screw, and when approximated, so as to close the vessel, but not to compress its walls, the blades are parallel to each other. The lower blade is made a little longer than the other and turned up at the end, so as to prevent slipping of the artery. The blades are covered with pieces of rubber tubing. In its clinical application a hypodermic injection of gr. 1-100 (or one-hundredth of a grain) atropine is administered 20 minutes before the operation in cases in which the technique is likely to involve the trunks of the vagi or their superior laryngeal branches for the purpose of preventing possible inhibitory action upon the heart. The Trendelenburg position is recommended, although the patient should be returned to the horizontal position before removing the clamps. Clinical notes of eighteen cases are given, where both common carotids were closed in ten, one common carotid in five, one external carotid in three. The ages of the patients ranged from seven months to sixty-nine years. There were no deaths attributable to the temporary closure of the arteries. In every instance the circulation was resumed immediately upon releasing the clamps; there were no later cerebral effects; less anæsthetic was necessary; the operating time was much diminished, since the field of operation was quite free from blood. Where there was marked slowing of the pulse rate from irritation of the vagi the application of a 2% solution of cocaine around the trunk of the nerve quickly restored the rate.

DISEASES OF EAR, NOSE AND THROAT.

Retrospect of Laryngology.

McIntyre (*Journal Laryngology*, January, 1902) states that the consensus of opinion of the British laryngologists regarding treatment of tuberculosis of the larynx seems against too much surgical procedure. Lake estimated that only 15 per cent. were improved by operation. Some consider the best treatment to be an early diagnosis and the general treatment such as is used in pulmonary tuberculosis. Resorcin used by insufflation has been strongly recommended. The Finsen and X-ray treatment seem to give the promises for the future. The action of the former depends on the presence of an anæmia of the part treated, but it is too painful to be borne for any length of time. The difficulty of the X-ray seems to be in focussing properly on the desired area. Malignant laryngeal disease has been carefully considered, and the tendency is strongly in the direction of external operation and thorough removal of the disease.

Curtis points out that the earliest symptom in laryngeal tuberculosis is sluggishness of movement of the vocal cords with subnormal morning temperature. It is an error to look for erosions. The next symptoms are grayish yellow spots in the submucosa, or a swollen appearance of one cord. Then follow some dysphagia, the appearance of the submucous tubercle, and finally the ulcer.

Hæmorrhage after Tonsillotomy.

St. Clair Thomson (*Practitioner*, January, 1902) deprecates the use of the tonsil guillotine in subjects over 20 years of age, and suggests the cold snare, enucleation, morcellement, or the galvano-cautery. The guillotine used should be of the smallest size that will do the work. This is always smaller than the longitudinal diameter of the gland, for as the pedicle is much narrower than the presenting surface, the loop of the instrument should be threaded over it so as to closely embrace the neck. This avoids any risk of embracing parts of the faucial pillars, or even deeper structures, even though the tonsil be firmly pressed in from the outside. If bleeding does not cease in 10 or 15 minutes, illuminate the region well, find the bleeding point, and clamp it with a pair of catch forceps. Failing this, steady pressure must be kept up on the surface for some time, and there is nothing that does better than the practitioner's forefinger.

Treatment of the Naso-pharynx in Scarlatina.

Leibert (*Arch. of Pediatrics*) says that one of the gravest dangers to scarlet fever patients consists in the invasion of the naso-pharynx by streptococci and their associates. He recommends the following mixture for a superficial disinfection of the throat, to be swallowed every hour in a reclining position:—

R.	Tinct. Iodi.	m. 30
	Pot. Iodid.	gr. 15
	Acid Carbol.	m. 10
	Aq.	℥iv.

A teaspoonful every hour.

This may be given for four or five days to children of one year of age, as well as to adults. To disinfect the naso-pharynx, he irrigates the nostrils with half-a-pint of a warm 1 to 5 per cent. solution of ichthyol, repeated every six hours. When the nares are obstructed he recommends the application to the naso-pharynx of a 50 per cent. retorcin solution.

Irrigation after Operation on the Nasal Accessory Sinuses.

W. A. Wells (*Boston Medical and Surgical Journal*, October, 1901) recommends protargol in 2 to 5 per cent.

solutions as giving the best results. He uses it at first once a day, and later on every second day. He also advises that every three, four, or five days a thorough rubbing of the walls of the sinus should be effected with a 20 to 40 per cent. solution of protargol in glycerine and water.

The topical application of Mucin in certain affections of the nose, throat, and ear.

W. Stuart-Low (*Lancet*, April 5, 1902) claims for mucin that it is a natural remedy, which restores the moisture to the mucous linings of the nose, throat, and ear in cases where there is dryness of these membranes, and also maintains it in virtue of its hygroscopic properties. He believes also that mucin possesses a bactericidal action. When applied to the nose and pharynx mucin has a soothing and emollient action; it softens incrustations, facilitates their removal, and thus obviates fetor. He claims good results in dry conditions of the larynx, and also in cases of dry catarrh of the middle ear with narrowing of the Eustachian tube. He injects twice a week a few drops of a solution of mucin into the Eustachian tube. In some cases the tinnitus especially has been much relieved. He uses a soloid (B.W. and Co.) composed of five grains of mucin, five grains of sodium bicarbonate, and one grain of menthol, dissolved in one ounce of sterilized water, this either to spray, douche, or syringe. He condemns strongly liquid paraffins for intra-nasal use, holding that they are absolutely useless as moistening agents; in fact, they act inimically, because they clog and paint over the still remaining and half-atrophied mucous glands.

THERAPEUTICS.

Arrhenal.

This is the name given by Professor Gautier to a new remedy he has lately introduced, which he considers will be a valuable remedy in the treatment of pernicious anæmia and pulmonary tuberculosis. It is a di-sodium methyl arseniate, which is allied to cacodyl. A great objection to the use of cacodylate of sodium, which was introduced some two or three years ago, is the garlic-like odour of the breath, which is so unpleasant to the patient, and which always follows its administration whether by mouth or rectum. Arrhenal is said to have none of these unpleasant effects, and the therapeutic result is said to be more marked. Gautier has used the drug in doses of from five to ten centigrammes hypodermically. In malaria, it is said to be more effective than quinine, two or three hypodermic doses being sufficient to effect a cure. Under the influence of the drug the red corpuscles are said to increase at a very rapid rate, the number rising from 2,740,000 to 3,420,000 per cubic millimetre in 48 hours. In phthisis this influence of the drug is said to be remarkable, the cough diminishes in frequency and intensity, the pains in the stomach and vomiting cease, and the appetite returns. These good effects are said to be due entirely to the drug and are not confined to the lungs, the liver and kidneys being benefited by its use. Robin has confirmed these statements. In phthisis the drug is given twice daily during meals, ten drops of a five per cent. solution being used. After it has been used for seven days the administration is suspended for seven days, and then resumed again. If Gautier's experiences are confirmed, this new drug would seem to have a valuable future before it, especially in the various colonies where malaria prevails.

Hydrobromate of Hyoscine in Tremor.

Robin (*Bulletin Général de Thérapeutique*, February, 1902) advocates the use of this remedy in the treatment

of chronic instability of the muscles. As the remedy is a powerful one, it must only be administered with the greatest care and in the smallest doses. Five cases of this nature have been treated by this author, namely senile tremor, paralysis agitans, chorea, and in four out of the five, distinct improvement followed the use of this drug, in doses varying from 0.0001 grm. to 0.0005 grm. every day. Judson Bury (*Lancet*, April 19th, 1902) records his experience of the use of hydrobromate of hyoscine in two cases of paralysis agitans. At first the drug was given hypodermically, the dose being gradually increased from $\frac{1}{100}$ th to $\frac{1}{50}$ th of a grain once a day. As the larger dose produced nausea, dryness of the mouth, and giddiness, the injections were discontinued, and the drug given as a mixture with chloroform water. At first $\frac{1}{100}$ th of a grain was given twice daily; this was gradually increased to $\frac{1}{50}$ th of a grain. The patients took this dose without any ill effects, and appeared to be much better. They stated that they felt more comfortable, and were less troubled than formerly with flushings and restlessness. The tremor became less marked, as shown in tracings taken before and after the administration of the hyoscine, and the attitude and gait were also improved by the treatment. "A prescription which is useful is one-eighth of a grain of hyoscine hydrobromate in six ounces of chloroform water. At first two teaspoonfuls of this may be given, then three, four, or five teaspoonfuls. If necessary the dose may be increased to six teaspoonfuls ($\frac{1}{10}$ th of a grain), providing toxic symptoms are not produced. The hyoscine is best given in the morning, just after breakfast, and again in the evening, just before going to bed, if the patient is troubled with restlessness and sleeplessness during the night." (R. T. Williamson: Paralysis Agitans.)

Treatment of Pericarditis.

Norbury (*Journal of the American Medical Association*, December 14, 1901) discusses the treatment of pericarditis. The etiological factor in the disease must be first considered, and if there be a rheumatic element present then the use of the salicylate will help most so far as drug treatment is concerned to favour resolution. It is important to remember that most cases of rheumatic pericarditis get well if they are left alone; that is, if they are kept quiet and any indications for more active treatment carefully watched. Symptomatic treatment will be directed to giving the patient relief from pain, promoting sleep, and generally making the patient more comfortable. For the relief of pain, sometimes a blister over the precordium will suffice to meet this indication; but if not, then the use of continuous cold, such as an icebag, may be of service. If cold is not tolerated, then hot applications may be tried; and if these means fail, morphia guarded with a cardiac support may be given. As the patient is frequently restless, bromide of sodium should be given during the day, commencing at noon, then again at four o'clock, and again at bedtime. If cerebral symptoms, with hallucinations and fear of death, or insomnia, be present, then trional or a combination of sulphonal and trional are advocated as useful remedies. If the heart needs stimulation, strychnine, digitalis, or strophanthus may be used. In treating the effusion, the author advises against meddling interference, since the tendency of the effusion is to be absorbed, and interference is only warranted when the indications are urgent. According to Osler, these are "dyspnoea, small, rapid pulse, dusky, anxious countenance," and, the author adds, the physical signs of extensive effusion. Gibson recommends as the most suitable site for paracentesis the fifth intercostal space just inside the nipple line. Bretano maintains that tapping is dangerous, and holds that there is no accurately determined and fixed space where the pericardium

can be tapped without risk. He resects the fifth costal cartilage, punctures the pericardium, and then incises. Operative interference is contra-indicated where previous cardiac disease has existed.

The Treatment of Delirium Tremens and Alcoholic Toxæmia.

Crothers (*Medical Record*, December 14th, 1901) states that while the withdrawal of all alcohol is the first step in the treatment of this condition, a cessation of the delirium does not immediately follow; on the contrary, delirium and delusions will usually break out with greater intensity 24 or 48 hours afterwards. After the removal of the alcohol, vigorous efforts must be made to remove the conditions which favour the formation of the toxins. This may be secured by the use of saline cathartics, hot air and hot water baths, hot packs followed by vigorous rubbing. The profuse sweating is valuable not only for its eliminative action, but also for its sedative effects. When delirium is present no narcotics should be given, and total abstinence from all solid or liquid food during the early stage gives the best results. Where there is a craving for alcohol, strong solutions of quassia and cinchona given every hour will tend to remove it. During the convalescent stage small doses of arsenic, with cinchona in combination with phosphate of soda, will be useful as a tonic. The evils to be avoided are over-drugging and over-feeding, the object in view being to assist Nature to overcome the toxæmia and build up the damaged organism.

PUBLIC HEALTH.

South Australia.

Vital Statistics.—The return of births and deaths registered in South Australia exclusive of the Northern Territory, during the month of March, for the period 1897-1902, shows the rate per cent. of births to be, 1897, .276; 1898, .248; 1899, .220; 1900, .236; 1901, .228; 1902, .208. The death rate per cent. for 1897 was .109; 1898, .118; 1899, .098; 1900, .092; 1901, .105; 1902, .079. The chief causes of deaths registered in the month of March, 1902, were zymotic diseases, 41 (diarrhoea 15, enteric fever 7). Constitutional diseases, 51 (cancer 19, phthisis 23). Developmental diseases, 34 (old age 19). Local diseases, 132 (diseases of the circulatory system 36, pneumonia 9, diseases of the nervous system 12, enteritis 20). The return of births and deaths registered in the city of Adelaide in the month of March, during the period 1897-1902, show the rate per cent. of births to be 1897, .228; 1898, .211; 1899, .275; 1900, .251; 1901, .235; 1902, .188. The death rate per cent. was, 1897, .223; 1898, .214; 1899, .188; 1900, .197; 1901, .250; 1902, .150. The chief causes of deaths in the month of March, 1902, in Adelaide were constitutional diseases, 16 (cancer 5, phthisis 8). Local diseases, 27 (diseases of the circulatory system 9).

New South Wales.

Sydney Vital Statistics.—During the month of March, 1902, 1,008 children were born. This total is 42 less than the average for March during the previous five years. The deaths during the month numbered 438, or exactly the same as the quinquennial average for March, leaving a balance of 570 births over deaths.

True infant mortality was at the rate of 116 per 1,000. The record of births compares unfavourably with the March figures for the preceding 10 years, the rate of 2·00 per 1,000 of population being the lowest during the decennium. The death rate affords a most favourable contrast with past records, being the lowest for 10 years relative to population. Zymotic diseases caused 51 deaths, or 12 per cent. of the list (bubonic plague 14, typhoid fever 8). Constitutional diseases 58 deaths, or 13 per cent. of the whole list (phthisis 24, cancer 24). Developmental diseases produced 32 deaths, or 7 per cent. of the roll (premature births 12 cases, senile decay 15). Local diseases, 240 deaths, or nearly 55 per cent. of the death list. Diseases of the nervous system, 42 deaths (apoplexy 13). Diseases of the circulatory system, 49 deaths (endocarditis 12, syncope 9). Of the respiratory system, 30 deaths (pneumonia 15). Of the digestive system, 86 deaths (enteritis 61).

During the month of March, 1902, there were 146 births registered in the Newcastle district. The deaths numbered 59. Of these 31 were due to local diseases, 8 to zymotic, 7 to constitutional, 5 to developmental. Of the persons who died, 29, or 49 per cent., were under five years of age, and 20 less than 12 months old.

Bubonic Plague.—Report for week ending June 13, 1902:—Total cases, 140; total deaths, 38; discharged recovered, 80; remaining under treatment, 22. Zoological Gardens: On the eve of the re-opening of the Zoo one of the attendants was smitten in a most virulent form, and has since died. The authorities have decided to keep them closed to the public indefinitely.

Queensland.

Bubonic Plague.—Report for week ending June 7th, 1902:—Remaining under treatment May 31st, 18; reported during week, 0; discharged recovered, 8; died during week, 0; remaining under treatment, 10. Total number of cases reported to date, 81; total number of deaths, 24; total discharged recovered, 47. Total number of contacts, 432; number of cases among contacts, 4. Brisbane, 79 cases; Rosewood, 1 case; Townsville, 1 case.

New Zealand.

The district health officers of New Zealand will visit Australia in rotation to study the treatment of plague cases.

The suspected case recently reported from Lyttelton has been proved not to be plague.

A steerage passenger from Melbourne by the "Monowai" named Richard Moore was found suffering from symptoms like plague, and was removed from the ship at Lyttelton to the plague hospital at Bottle Lake, near Christchurch. Dr. Mason pronounced the case not to be plague.

Victoria.

Vital Statistics of Melbourne and suburbs for the year 1901.—The births registered during the year numbered 12,375; the birth rate shows a heavy and continuous fall from 1899—when it was at a maximum of 38 per 1,000—to 1900 and 1901, when it appears to have reached its lowest level of a little below 25 per 1,000. The birth rate in 1901 was 3·6 per 1,000 below the average of the last decade and 11 per 1,000 below that of the previous one. The rate of mortality in 1901 was the lowest in the last twenty years, except 1897, 1899, and 1900. The fall in the death rate in later, as

compared with earlier years, is most striking, viz., from an average of nearly 20½ per 1,000 in the decade ended March, 1891, to 15½ in that ended with 1901. The chief causes of death were—zymotic diseases 632, or 8·41 per cent. (influenza 142, whooping cough 125, diphtheria 45, enteric fever 69, diarrhoea 84); of these 632 deaths 288 were of children under five years of age. Constitutional diseases 1,576, or 20·97 per cent. (cancer, malignant diseases, 445, phthisis 771), local diseases 3,964, or 52·75 per cent. (diseases of the nervous system 829, of the circulatory system 810, of the respiratory system 829, diseases of the digestive system 865).

Tasmania.

Vital Statistics.—During the month of April 148 births were registered in the registration districts of Hobart and Launceston. This is 35 more than in the corresponding month last year, and an increase of 34·8 as compared with the average of the births registered in April during the last five-yearly period. The deaths registered in April, in Hobart and Launceston, numbered 70. This number is 12 more than in the corresponding month last year, and shows a decrease of 2·4 as compared with the average number of deaths registered in April during the last five-yearly period. In the country districts the births numbered 299, or 2·55 per 1,000 of the population. The total deaths during April were 82, or ·70 per 1,000 persons.

The sixth annual report of the medical officer of health for Hobart, Dr. Gregory Sprott, has been published. The population of the city, as shown by the census, is 24,655, a decrease of 6,501 on the estimated population of last year. The death-rate was equal to 13·47 per 1000. The death-rate appears much higher than that of 1900, but this is owing to over-estimated population of last year.

The principal causes of death were:—Influenza, 3; diphtheria, 3; typhoid fever, 5; diarrhoea, 10; pyæmia, 3; cancer, 26; phthisis, 28; tuberculosis, 8; pneumonia, 14; bronchitis, 12; premature birth, 12; old age, 38; apoplexy, 9; diseases of heart and circulatory system, 39; enteritis, 16; Bright's disease, 6; atrophy or inanition, 21; accident or negligence, 6.

Total number of births registered was 685—males, 356; females, 329.

The report concludes by making the following recommendations:—

1. To secure an isolation hospital, with a proper disinfecting chamber for public use.
2. To assist the Metropolitan Drainage Board to carry out a scheme of drainage which will get rid of the foul-smelling rivulets and cobble-gutters of the city.
3. To convert the graveyards within the city into flower gardens or places of recreation.
4. To introduce a system of refuse collection, and construct a refuse destructor.
5. To erect new and modern abattoirs in a more suitable site, and to enforce a better system in the mode of carriage of meat through the city.
6. To relieve the sanitary inspector of all work except that pertaining to the Health Department, so that a more complete inspection of foods, premises, etc., can be made.

NURSE HYDE PAGE has taken St. Agnes' Private Hospital, 238-242 Forbes-street, Darlinghurst (telephone 271 William-street), lately carried on by Dr. W. E. Warren. She is a Prince Alfred trained nurse and a member of the Australasian Trained Nurses' Association.

MEDICAL NEWS.

The Late Dr. L. E. F. Neill.—The friends of the late Dr. L. E. F. Neill, B.A., M.B., Ch.M., of Sydney, whose sudden death took place more than a year ago, decided to perpetuate his memory by erecting a drinking-fountain on the University Sports Oval. The fountain was unveiled on Saturday afternoon, June 7th, by the Hon. Dr. MacLaurin, M.L.C., Chancellor of the University, in the presence of a large and representative assemblage. It is of handsome design. The base of the pedestal is of polished trachyte stone, and the steps which surround the base are also of trachyte. The fountain itself is of carved freestone, resting on polished granite pillars, with a large carved cap stone. The design is Gothic. In the centre is an ornamental bronze cup. At each of the four angles are stone bowls with polished metal taps and bronze cups. The monument stands between the main entrance to the ground and the grandstand, and within the members' enclosure. On the face of the pedestal is the inscription, "Erected to the memory of L. E. F. Neill, B.A., M.B., Ch.M., Sydney, scholar, athlete, and gentleman." On the side of the pedestal are the words, "This memorial was erected by his comrades in the medical profession and football field, and by other friends."

Death under Chloroform.—A railway ganger at Mount Gambier, South Australia, aged 45, died under chloroform when about to be operated on for hydatid of the liver. Almost immediately after the administration of the anæsthetic had begun dangerous symptoms were observed. Restorative measures were taken, and continued for an hour, but failed. A post-mortem was made, and the lungs and heart were found to be healthy. Death was found to be "due to paralysis of that part of the brain which controls the respiration, and that paralysis was due to the administration of chloroform."

Prehistoric Man.—Dr. Elliot Smith, professor of anatomy in the Medical School at Cairo, is investigating some human remains discovered at Girga, in Upper Egypt. The graves containing the remains are said to consist of a continuous series extending over an interval of at least 8,000 years, which represents the most archaic of prehistoric periods. The bodies are so well preserved, owing, doubtless, to the dryness of the atmosphere where they were interred and to the perfection of interment, that not only can the hair, nails, and ligaments be made out, but the muscles and nerves. In almost every case the brain is said to be preserved, and the climax has been reached in two examples where the eyes, with lens in good condition, are present, and in others in which Dr. Elliot Smith has already observed the limb plexuses and great splanchnic nerve. There are also now unearthed a series of later prehistoric graves, ranging throughout the first fifteen dynasties, others of the eighteenth, and yet others of the Ptolemaic and early and recent Coptic periods.—*Nature*.

PERSONAL ITEMS.

Dr. W. A. HARRISON has removed from Kelly's Basin (Tas.) to Mulwarre (W.A.).

Mr. J. A. COWIE, B.A., B.Sc., Otago and Glasgow Universities, has passed the examination in anatomy and physiology of the Royal College of Physicians and Surgeons.

Dr. G. L. BELL, Government medical officer, Camden (N.S.W.), was recently presented with a handsome

solid silver tea and coffee service by the residents, on the eve of his departure for South Africa with the Commonwealth Horse. The Mayor, Alderman G. M. Onslow, made the presentation.

At a recent meeting of magistrates at North Melbourne, Dr. LLOYD was elected chairman of the local bench for the ensuing twelve months. Dr. Lloyd has now held the position for over 35 years.

Dr. L. S. ANGIN, of St. Arnaud (Vic.), recently fractured his right collar-bone by being thrown from his horse.

Probate in the will of the late Dr. Wm. SNOWBALL, of Carlton (Vic.), is being applied for. The estate consists of £8,500 realty and £4,400 personalty, which testator left to his widow and children.

Mr. F. M. HARRICKS resigned his office as out-patient surgeon at the Alfred Hospital, Melbourne. The president credited Mr. Harricks with having been a very careful and skilful surgeon in the service of the institution for twenty years. It was his intention to give up practice and retire into the country. The resignation was received, and it was decided, on the motion of Mr. Collins, to forward a letter to Mr. Harricks, thanking him for and expressing appreciation of his long services.

Dr. T. ROWAN is about to leave Melbourne for South Africa, and the Women's Hospital committee decided to present him with a testimonial in acknowledgment of the splendid services he has rendered to that institution. Dr. Rowan entered the hospital as resident surgeon, and was afterwards elected on the honorary staff. For some years he filled the position of chairman of the staff, and altogether his connection with the hospital extended over a period of twenty-five years.

Dr. M. A. SCHALIT has commenced practice at Randwick.

Dr. ADA AFFLECK-HARDMAN, late Resident Medical Officer at the Coast Hospital, Little Bay, has commenced practice at Macquarie Street, Sydney.

Dr. D. LUKE, late of Brewarrina, having returned from England, has commenced practice at 183 Liverpool Street, Sydney.

Dr. CLEOHORN, of Wellington, N.Z., surgeon, died suddenly on June 10 from heart disease.

Dr. R. W. McCREDIE, late Resident Medical Officer at Sydney Hospital, has succeeded to the practice of Dr. Donald Luker at Brewarrina, N.S.W., and has been appointed surgeon to the Brewarrina Hospital.

TRAINED MALE NURSE seeks engagement in mental or ordinary medical cases. Has had considerable experience in mental nursing, massage, etc., and is accustomed to travelling with patients to Europe and in the Australasian States. Unexceptional testimonials. References kindly permitted to Drs. F. N. Manning, Jarvie Hood, W. E. Warren, T. S. Dixon.

Address: R. T. O'NEILL,
68 Crown Street,
Nr. William Street.
(Late 17 Leicester Street, Sydney.)

Telephone No. 166 William Street.

MEDICAL APPOINTMENTS.

NEW SOUTH WALES.

Godfrey, Dr. Horace Percy, to be Visiting Surgeon to the Gaol at Orange during the absence of Dr. N. R. Howse.
 Rennie, George Edward, M.D., M.R.C.P. (Lond.), to be a member of the Medical Board of New South Wales, *vice* Dr. H. G. A. Wright, deceased.
 Stevens, Dr. W. W., as Junior Medical Officer at the Coast Hospital, *vice* Dr. Ada C. Affleck, resigned.

VICTORIA.

Crawford, Arthur William, M.B., to be Medical Officer of Health for the Shire of Yarrowonga during the absence on leave of Edward Francis O'Sullivan, M.D.
 Crawford, Arthur William, M.B., to be Public Vaccinator for the Northern District during the absence of E. F. O'Sullivan, M.D.
 Dobie, Henry Edwin Newman, M.B., to be Public Vaccinator for the Midland District.
 Gordon, John, M.D., B.S., Melb.; L.R.C.P., Lond.; F.R.C.S., Eng., has been elected Hon. Surgeon to out-patients of the Melbourne Hospital.
 Johnson, Charles Harold, M.D., to be Health Officer for the Shire of Yackandandah, *vice* Frederick Charles Acton, M.B., resigned.
 Mackay, Dr., has been appointed Indoor Surgeon to the Children's Hospital, Melbourne, *vice* Dr. Snowball, deceased.
 Meares, Albert George, L.R.C.P., Medical Officer of Health for the Shire of Portland (East Riding), *vice* James Forrester Matthews, M.R.C.S., resigned.
 Scott, James Andrew Neptune Scott, M.D., to be Health Officer for the Shire of Wycheproof, *vice* Ralph Charles Brown, M.D.
 Strang, Thomas, L.F.P.S., to be Public Vaccinator for the South-Eastern District, *vice* William Alexander Morton, M.B., resigned.
 Stawell, Dr. R. R., has been appointed Indoor Physician to the Children's Hospital, Melbourne, *vice* Dr. Snowball, deceased.
 Strahan, Dr. S. G., has been appointed Resident Medical Officer and Dispenser to the Benevolent Asylum, Melbourne.
 Springthorpe, John William, M.A., M.D., to be President of the Dental Board.

SOUTH AUSTRALIA.

Veroo, Clement Armour, M.B., Ch.M., to be a Public Vaccinator. The following to be Hon. Medical Officers of the "Queen's Home" (Maternity), Adelaide:
 Ewbank, W. W., M.R.C.S.
 Gunson, J. B., M.B., M.R.C.S.
 Hamilton, J. A. G., M.B.
 Jay, M., M.R.C.S.
 Lendon, A. A., M.D.
 Marten, R. H., M.B., B.S.

WESTERN AUSTRALIA.

Barker, G., to be District Medical Officer at Kalgoorlie during the absence on leave of J. A. O'Meehan.
 Brown, Dr. R. P., to be Medical Officer of Health at Belmont.
 Brown, Dr. R. P., to be Medical Officer of Health at Victoria Park, *vice* Dr. A. E. Randall, resigned.
 Brown, Dr. R. P., to be Medical Officer of Health at Canning.
 Darbyshire, Dr. Douglas E., to be Special Medical Officer to the Central Board of Health, Perth.
 Duncan, Dr. S. V., to be Officer of Health, Kookynie.
 Hickinbotham, Dr. J. R., to be District Medical Officer at Carnarvon, Public Vaccinator for the Urban and Suburban Districts of Carnarvon and the Rural District of Gascoyne, and Quarantine Officer for the Port of Carnarvon, *vice* D. E. Darbyshire, resigned.
 Laurie, W. Spalding, M.B., B.S. (Melb.), to be House Physician at Perth Public Hospital, *vice* G. C. Harper, M.B.
 White, Dr., to be Medical Officer of Health at Fremantle during the absence on leave of Dr. J. W. Hope.

QUEENSLAND.

Gullett, Lucy, M.B., Ch.M. (Syd.), appointed Resident Medical Officer of the Children's Hospital, Brisbane.

NEW ZEALAND.

Allen, Dr. S. E., has been temporarily appointed by the Government as Assistant Medical Officer at Seaciff Asylum.
 Beard, Spencer Francis, L.S.A. Lond., M.R.C.S. Eng., to be Public Vaccinator for the District of Pahiatua.
 Clay, David Lloyd, M.R.C.S. Eng., L.R.C.P. Lond., to be Public Vaccinator for the District of Otaki.
 Low, Charles, M.B., &c., to be Public Vaccinator for the District of Mercury Bay.
 Lucas, Stanley Arthur, M.R.C.S., L.R.C.P., Lond., to be a Public Vaccinator under the Public Health Act, 1900, for the District of Takaka, *vice* Dr. Satchell.

Morkane, Dr. M. C. F., has been appointed Surgeon Superintendent of the Ross Hospital.
 O'Brien, Terence, Inspector of Police, Dunedin, to be an Inspector of the School of Anatomy at Dunedin, *vice* Inspector W. S. Pardy.
 Power, Patrick Joseph, L.R.C.S. Ireland, to be Public Vaccinator for the District of Otaki.
 Walker, Ernest C. D., M.B., C.M., Assistant Medical Officer of the London County Asylum, Hanwell, has been appointed Assistant Medical Officer of the Seaciff Lunatic Asylum.
 Wheeler, Charles Henry, M.D., &c., to be a Port Health Officer for the Port of Hokianga.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

QUEENSLAND.

O'Brien, Richard Alfred, M.B., B.S. 1902, Univ. Melb.
 Reid, Francis Bentley, L.R.C.P.S. Edin. 1898, L.F.P.S. Glas. 1898.
 Robinson, Robert Alexander McWilliam, L.R.C.P.S. Edin. 1894, L.F.P.S. Glas. 1894.

NEW SOUTH WALES.

Adams, John, L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glas. 1888.
 Coto, Daniel Samuel, L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glas. 1900.
 Crowe, Henry Warren, M.B., Ch.B. Oxon. 1902, L.R.C.P., M.R.C.S. Eng. 1901.
 Giommi, Mario, M.D. Modena 1898.
 Hardy, James Arthur, L.R.C.P. Edin. 1874, M.R.C.S. Eng. 1874.
 Harper, George Craig, M.B. Melb. 1901.
 Murray, Alexander Lang, L.R.C.P., L.R.C.S. Edin. 1888, L.F.P.S. 1888.
 Mawden, Charles Edward, M.B. Univ. Melb. 1901, Ch.B. Univ. Melb. 1902.
 Robertson, Arthur William, L.S.A. Lond. 1897.
 Schalit, Moise Aaron, M.D. Univ. Geneva 1900.

SOUTH AUSTRALIA.

Keller, Nettie Florence Armstrong, M.D. American Medical Missionary College, U.S.A.
 O'Connor, William Laurence, M.B., B.S. Melb.
 Pitt, Herbert Reginald, M.B. Ch. B. Melb.

WESTERN AUSTRALIA.

Allan, Leslie Stuart, M.B. Melb. 1901.
 Harrison, William Atkinson, M.B., C.M. Edin. 1890.
 Laurie, William Spalding, M.B. Melb. 1901, B.S. Melb. 1902.
 Lewis, James Brook, M.B. Melb. 1900, B.S. Melb. 1901.

BIRTHS, MARRIAGES AND DEATH.

BIRTHS.

KEARNEY.—On May 1, at Clifton, the wife of Dr. A. D. Kearney—a daughter.
 M'CLELLAND.—May 19, 1902, 1 Erskineville Road, Newtown, to Dr. and Mrs. Walter C. M'Clelland—a daughter.
 ROLLASON.—On May 23, at "Erdington," Heidelberg, the wife of Dr. Abel Rollason—a daughter.

MARRIAGES.

HAYES—DAWSON.—On April 23, at Holy Trinity Church, Warton, by the Rev. Thomas Holland Pain, vicar of Warton, George Constable Hayes, F.R.C.S., Park-place, Leeds, third son of George Horace Hayes, Kamea, Caulfield, to Kenee Phoebe, second surviving daughter of Edward Storey, of Crosslands, Lancaster, and widow of Edward Howard Dawson, of Warton Hall.
 EKENSTEEN—DOUGLAS.—On April 30, at St. John's Church, Darlinghurst, by the Rev. Canon Pain, Hermann Robert Ekensteen, Sydney, to Annie Lynetta, widow of the late Charles Henry Douglas, M.D.
 FLETCHER—CREASEY.—On April 30, 1902, at St. Patrick's Church, Parramatta, by the Rev. Father T. O'Reilly, P.F., by special license, Frederick William Joseph Fletcher, M.D., Ph.C., Homebush, only son of the late Captain Fredk. Wm. Fletcher, Sydney, to Bessie St. Clair, fourth daughter of the late John Doughty Creasey, Esq., late of Parramatta and Friskney, Lincolnshire, Eng., and niece of the late Dr. Enderby, Wainfleet, Lincolnshire, Eng. New Zealand and home papers please copy.

LIPSCOMB-NORRIS.—On April 29, 1902, at Blessed Peter Chanel's Church, Hunter's Hill, by the Rev. Z. F. Muraire, S.M., Thomas Walter Lipscomb, M.B., Ch.M., son of William Griffin Lipscomb, of West Maitland, to Beatrice Mary, daughter of Richard Augustine Norris, of North Sydney.

MEAD-HART.—On May 7, at St. James', King Street, by the Rev. Canon Garland, Ravis Mead, M.B. and C.M., to Ethel Constance Hart.

DEATH.

PHIPPS.—On June 6, at "Toonalook," Paynesville, Victoria, Lavinia Mary, the beloved wife of John Blakemore Phipps, M.D., F.R.C.S., formerly of "Lausanne," Romsey; aged 78 years.

BOOKS RECEIVED.

THE MEDICAL ANNUAL FOR 1902. J. Wright and Co., Bristol.
LOCAL TREATMENT IN DISEASES OF THE UPPER AIR PASSAGES. Sir Felix Semon, M.D., F.R.C.P. Macmillan and Co., Ltd. From Messrs. W. B. Saunders, Philadelphia, per Mr. Jas. Little, Melbourne.

DOSK-BOOK AND MANUAL OF PRESCRIPTION WRITING. E. Q. Thornton, M.D.

PRACTICAL SURGERY. Nicholas Senn, M.D.

AMERICAN TEXT BOOK OF PATHOLOGY. L. Hektoen, M.D.

MANUAL OF SYPHILIS AND VENEREAL DISEASES. J. N. Hyde, M.D.

ATLAS AND PRINCIPLES OF BACTERIOLOGY AND SPECIAL BACTERIOLOGIC DIAGNOSIS. Prof. Dr. K. B. Lehmann and R. O. Neumann, M.D., Ph.D.; edited by G. H. Weaver, M.D. Part I. and II.

THE PRINCIPLES OF HYGIENE. D. H. Bergy, M.D.

ATLAS AND EPITOME OF SPECIAL PATHOLOGIC HISTOLOGY. Dr. H. Durck; edited by L. Hektoen, M.D.

LABORATORY HAND BOOK OF URINE ANALYSIS AND PHYSIOLOGICAL CHEMISTRY. C. G. L. Wolf, M.D.

LABORATORY COURSE IN BACTERIOLOGY. Prof. F. H. Gorham.

TYPHOID FEVER AND TYPHUS FEVER. Dr. H. Curschmann; edited by W. Osler, M.D.; authorised translation under A. Stengel, M.D.

MODERN OBSTETRICS. W. A. N. Dorland, M.D.

TEXT BOOK OF PHARMACOLOGY. T. Sollman, M.D.

VARIOLA, VACCINATION, VARICELLA, CHOLERA, ERYSIPELAS, WHOOPING COUGH, HAY FEVER. By H. Immermann, Th. Von Jurgensen, C. Lenhartz, G. Sticker. Edited (with additions) by J. W. Moore, M.D., F.R.C.P.; under the supervision of Alfred Stengel, M.D.

THE FOUR EPOCHS OF WOMAN'S LIFE. By Anna M. Galbraith, M.D.

ESSENTIALS OF PHYSIOLOGY. By Sydney P. Budgett, M.D.

ATLAS AND EPITOME OF OPHTHALMOSCOPY AND OPHTHALMOSCOPIC DIAGNOSIS. By Prof. Dr. O. Haab; edited by G. E. de Schweinitz, M.D.

AN INTRODUCTION TO DERMATOLOGY. By Norman Walker, M.D. Wright: Bristol and London.

CONTRIBUTIONS TO PRACTICAL MEDICINE. By Sir James Sawyer, M.D., F.R.C.P. Cornish Bros., Birmingham.

ACUTE DILATATION OF THE STOMACH. By H. Campbell Thomson, M.D., M.B.C.P. Baillière, Tindall and Cox.

THE CLIMATES AND BATHS OF GREAT BRITAIN, being the report of a committee of the Royal Medical and Chirurgical Society of London. C. Theodore Williams, M.D., chairman; P. Horton-Smith, M.D., Hon. Sec. Vol. II. Macmillan and Co., Ltd.

THE METHOD OF CUIQUET, OR RETINOSCOPY, WITH ATLAS OF DIAGRAMS. By Edwin Harding, London, M.D. Baillière, Tindall and Cox, London, 1902.

DIAGNOSIS BY MEANS OF THE BLOOD. By R. L. Watkins, M.D., 1902. The Physicians' Book Publishing Co., New York.

THE STUDY OF THE PULSE, ARTERIAL PULSE, AND HEPATIC, AND OF THE MOVEMENTS OF THE HEART. By Jas. Mackenzie, M.D. Young J. Pentland, Edinburgh and London.

ELEMENTARY TEXT BOOK OF ZOOLOGY. By A. T. Masterman, M.A., Cantab. D.Sc. (Lond.) D.Sc. (St. And.). F.R.S.E. Second edition. Edinburgh: E. and S. Livingstone, 1902.

A TEXT BOOK OF MEDICAL JURISPRUDENCE, TOXICOLOGY AND PUBLIC HEALTH. By John Glaister, M.D., D.P.H. (Camb.), F.R.S.E. Edinburgh: E. and S. Livingstone.

MALE ATTENDANT for mental, inebriate, or general cases, seeks engagement. References and testimonials show 13 years' experience, including five years as attendant at Callan Park Hospital for Insane, three years as wardman in charge of Singleton Hospital. Address J. HILES, 161 Cecily Street, Leichhardt.

Quarantine Station at Newcastle.—At the invitation of Dr. Russell, medical officer of the port, and Dr. Dick, city health officer, the Mayor and aldermen paid a visit of inspection to the quarantine station recently established about three miles up the river on the ocean side. Up till quite recently, notwithstanding the fact that so many overseas vessels make Newcastle their terminal port, no facilities existed to cope with cases of infectious diseases which might reach here. The usual practice was to send them on to Sydney. The port is now, however, equipped with a thoroughly up-to-date quarantine station capable of accommodating 80 persons. The main hospital is intended for 24 beds, and there is accommodation for 44 contacts, whilst every convenience is provided for administrative purposes. Buildings have just been furnished sufficiently to meet any urgent requirements. A clean and pleasantly situated site has been chosen, the river being visible on one side and the ocean on the opposite side. An area of 80 acres has been reserved, and when the long anticipated steam ferry punt services are established with Stockton the station will be easily reached by vehicle. The Mayor and aldermen expressed great satisfaction at the precautions taken, and whilst hoping that it would be a long time before they would be occupied, thought that the Department of Public Health was to be congratulated in so ably recognising the importance of the port and city.

NOTICES.

THE "GAZETTE" IS EDITED FOR THE PROPRIETORS BY
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AND FOR THE OTHER BRANCHES OF THE

BRITISH MEDICAL ASSOCIATION BY

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AUSTRALASIAN MEDICAL GAZETTE.

A Clinical Lecture

ON

THE PROTEID BASIS OF GOUT AND RHEUMATISM.

BY

J. W. Springthorpe, M.A., M.D. (Melb.), Physician
to the Melbourne Hospital.

Lecturer on Therapeutics in the University of
Melbourne.

INTRODUCTION.

WE have recently had in the Wards a number of joint cases, including one of osteo-arthritis, one of tubercular knee, several of gonorrhœal infection, one post scarlatinal, one post neuritic, a number gouty, others rheumatic, both chronic and acute, with several subacute, or possibly the result of some obscure coccic infection; and a number of rheumatoid arthritis, some typical, others associated with either rheumatism or gout. You will, perhaps, have been struck with the comparative absence of those characteristic of your surgical experience such as the traumatic, septic, specific, tubercular, developmental, and malignant. You must have noted also that those diagnosed as gouty or rheumatic have presented many points of agreement amongst their recognised differences. The question is thus raised, have these somewhat kindred diseases any underlying common basis, and if so, is there any rational explanation of their differences? I propose to-day to attempt to show you that in all probability they have, and to suggest an explanation.

Of all the elements, nitrogen is by far the most interesting. Unlike the equally common carbon, hydrogen and oxygen, it has a variable number of valences, and, unlike sulphur, these are always uneven in number. Unlike all four, it combines equally well with electro-positive and electro-negative bodies, forming very strong acids and bases; and, unlike the other three, it can replace carbon atoms in a closed chain. Its combinations also exceed all others in number, variety, and importance, and when it reaches the proteid stage of development its molecule is not only unprecedentedly complex and peculiarly open to chemical and microbic influence, but it is the only compound known to us to exist in both the dead and the

living state. Introduced as proteid into the system with the food, it now enters upon a series of metamorphoses that are ceaseless and almost endless. By preliminary ferments it is converted into proteoses, albumoses, peptones, and ptomaines. It enters the blood in complex compounds of which we know practically nothing, and is there again built up and broken down by other ferments, and reinforced by internal secretions of a similar proteid character. In the tissues it still continues its changes of form, and participates in all the vital reactions; after which, by retrograde metamorphoses, it appears as urea, uric, and hippuric acids, bile, pigment, &c., and is finally excreted, partly through the kidneys, partly through the liver, as heterogeneous waste in a state of solution. Of this wonderful cycle of change we know but a few salient points, and have never yet been able to follow any one combination from first to last. But the specificity of the thyroid secretion and the specific response of antitoxin to toxin support the belief that perfectly definite combinations and amounts are the essential concomitants of each and every normal reaction. As illustrating the complexity of the molecular problem, I give the computed formula of a proteid from Hæmoglobin— $C_{726}H_{1171}N_{194}O_{214}S_3$ —and would remind you that one blood cell is computed to be large enough to hold 750,000,000 molecules.

DEFINITION.

It is only natural that the races which are pre-eminently meat-eating should have paid particular attention to this proteid factor in disease. The predominant English share may be gathered from the mere recapitulation of the names of Prout, Sydenham, Richardson, Murchison, Garrod, Fothergill, Roberts, and Haig, not to mention others almost equally well known. Many American and even some Australian observers have similarly been attracted to the same field of study; whilst the writings of Charcot well illustrate Continental work in the same direction. The pathological condition produced by abnormalities of proteid metabolism has been described under a variety of names—*e.g.*, lactic acid, acid dyscrasia, rheumatic and gouty diatheses, functional disease of the liver, the hepatic element in disease, uric acid, uric acidæmia, suboxidation of proteids, &c. But it cannot be maintained that any one of these is both adequate and accurate. No one acid is universally or always present; acidity itself is only local and

transient; the terms diathesis and dyscrasia explains nothing; the adjectives rheumaticy and gouty are primarily arthritic and themselves require defining; whilst a state of suboxidation can scarcely be predicated of all the conditions; and location in the liver ignores other organs which play at times perhaps equally important parts in causation. We need, indeed, a title system wide in its applicability, and non-committing in its chemistry, and for the present must apparently be satisfied with some such inconvenient phrase as "abnormal proteid metabolism."

ETIOLOGY.

We have apparently to deal with proteid compounds, abnormal in form or quantity, or both; generally, but not always of an acid tendency or nature; often, though not always, in a state of suboxidation; and at times, it may be, reinforced by toxins of germ origin. Omitting the last from our present classification, as well as instances of specific abnormalities in metabolism and the known causative agents of infective disease generally, there still remains possible a threefold origin. Thus there may be malassimilation in the gastro-intestine and liver; there may be faulty interchange in the tissues and organs; and there may be defective elimination. The first occurs at the entrance, and represents disturbance in the intestine and liver. It is perhaps best described, in the present state of our ignorance, as the manufacture of pathological irritants instead of systemic and physiological stimulants, or energy producers, and its extreme point is seen in the production of ptomaines, or toxins. The second occurs in the tissues generally, probably the muscles in particular, is mainly dependent upon the foregoing, but may have, in addition, its own local peculiarities. It is apparently largely a question of suboxidation, is a frequent cause of functional disturbance generally, and shows itself specially in muscles, nerves and joints. The third is the result of all the foregoing, with perhaps some further defect in the cells of the renal tubules inherited or acquired. According to some, however, the liver plays the most prominent part in this final metabolism.

SYMPTOMATOLOGY.

In the light of such a probable causation, I venture to recommend a careful review of such salient clinical records as Murchison's lectures on Functional Diseases of the Liver, Charcot's papers on Rheumatism and Gout in the Sydenham Society's Transactions, and Haig's work on Uric Acid. To come from great to small, and foreign to local, it may, perhaps, interest the curious amongst you to turn also to

the transactions of the Intercolonial Medical Congress, 1889, and see how the subject presented itself to myself some 13 years ago.

1. The general condition may still be best described by Murchison's phrase "Lithæmia," or the more commonly used term "Lithiasis." In the stomach there will probably be only an acid dyspepsia (mainly, however, from acid fermentation), or a local irritation from the blood contamination. If, as frequently occurs, there be stasis at the entrance, we may have the feeling of weight in the right hypochondrium, scapular pain, tendency to piles, varicocele, dysmenorrhœa or menorrhagia. If the bile function is upset we may have irregular bowels, variable stools, flatus colic, coated tongue, nasty taste, jaundice, cholelithiasis, with often an inheritance of such troubles evidenced by dark skin, hair and complexion. When pathological irritants enter the blood, or there is faulty tissue change, or defective katabolism, each and every part of the system is liable to functional disturbance, and ultimately structural change, in proportion to inherited weakness, or contributory causes, such as injury, exposure, overuse, etc. (considerations which must always be remembered in estimating and interpreting the phases actually found in individual cases). The complete picture, which, of course, is never found in its entirety in any one individual at any one time, or even in all his time, would include the following: increased blood tension, arterio-sclerosis, cardiac hypertrophy, nodules, papules, vesicles, pustules in the skin, with eczema and psoriasis, tendencies to inflammation upon slight provocation, and interrupted healing of parts; inflammations of mucous, serous, synovial and other membranes, with their appropriate sequelæ; bronchial and asthmatic attacks, muscular pains and spasms, sensory and vasomotor disturbances, headache, disturbed sleep, restlessness, irritable temper, vertigo, want of control, migraine, strange modes of thought, hallucinations, epilepsy, even mania in the markedly neurotic, with oxaluria, renal, vesical, and urethral irritation, grit gravel, calculi, and granular kidney.

2. Certain related symptoms are also occasionally present from the concomitant metabolism of other foods. Disturbed metabolism of carbohydrates and fats may produce oxaluria. Fatty and organic acids may similarly add to the acid dyscrasia. Nervous strain may render the blood super alkaline, produce the nervous symptoms of depression rather than of excitation, and the urine becoming alkaline and phosphatic; whilst at other times obesity, glycosuria and diabetes may complicate the lithæmia.

3. We are now prepared to consider the arthritic manifestations from this wider stand-

point. A sufficient reason for their frequency may probably be found in their physiological connection with muscle, their tendency to exposure and injury, and certain chemical and mechanical conditions which will be mentioned when dealing with gouty arthritis. We must, however, first eliminate senile arthritis, trophic arthritis, coccic arthritis (such as gonorrhoeal and pneumococcic) and rheumatoid arthritis. In practice, of course, this is often very difficult. Senile and trophic change may complicate any arthritis, as well as exist *per se*. The old diagnosis of an arthritis as rheumatic, because of the endocarditis that was also present, is no longer scientifically tenable; whilst rheumatoid attacks may follow, as some of our cases have shown, both rheumatic and gouty invasion. The differential diagnosis, however, of these conditions need not now detain us, specially in view of the practical illustrations which we have recently had in the Wards. But consideration of the general condition underlying both rheumatism and gout should prove helpful in arriving at a correct differentiation in any case of doubt.

For the lithæmic condition is, in my opinion, the key to the situation. It is generally admitted that many of the phenomena of rheumatism and gout occur in one and the same person, that the diseases themselves replace each other in different members of the same family, and that both the gouty and rheumatic are lithæmic. Lithæmia, indeed, is often described as "irregular gout," and "muscular rheumatism" ranks as one of the main manifestations of lithæmia. Charcot, again, has noted the association of migraine, asthma, muscular pains and skin eruptions with chronic rheumatism, and the causal connection of such with acute articular rheumatism; whilst Haig, as everyone knows, has brought them all under the one uric acid.

GOUT.

Take first the question of gout. Of all descriptions, Roberts seems to me to come nearest the truth. At our stage of development, he says, the insoluble uric acid that was suited to birds and serpents has been largely transformed into the very soluble urea which best suits our kidney. There are those, however, in whom the vestigium of uric acid is unduly prominent, and they are those who inherit gout. Specially in such, and even in many others, under stress of renal defect, plumbism, excess of proteid in their food, abuse of alcohol, or deficient oxidation, the biurate of soda, an almost insoluble salt, forms, and, when present in more than 1 part in 6000, precipitates. Cartilage, ligament, tendon and fibrous struc-

tures are rich in soda, hence they are the first seat of deposit, and, the synovial sacs being shut pools, show the egg-shell deposit, because less is likely to be absorbed therefrom. Thus arises an attack of articular gout. And when we seek to abstract the gouty portions from the lithæmic picture, clinical experience and long-continued observation of many phases and cases seems to me to warrant the following:—Gout is more a question of the tissues and the kidney than of the liver, is not accompanied by biliousness, pigmentary disturbance or irregular bile separation, shows also less portal stasis, far greater increase in blood tension, characteristic arterio-sclerosis, and cardiac hypertrophy, more renal than biliary lithiasis, more uric acid, more uræmia, far more granular kidney, more oxaluria, and perhaps less phosphuria. In the skin it shows eczema and trophi, on the whole has less to do with catarrh, is more affected by plumbism, deficient exercise, and alcohol, and is more resistant against the tubercle bacillus. It may thus be defined as a disease rather of defective elimination, due to abnormalities in the retrograde metamorphoses of the proteids, often a matter of inheritance, and attended with pathological changes, more at the point of exit through the kidneys.

RHEUMATISM.

Rheumatism, on the contrary, is more bound up with hepatic disturbances, bilious attacks, patal stasis, cholelithiasis, irregular bile separation and characteristic pigmentary inheritance. The cardio-vascular manifestations are much less marked, the kidney condition practically non-existent; there is less wheezing, but more catarrh. The muscular phases are specially marked and characteristic, and there is probably more sciatica. The skin conditions again seem more varied, and include erythema, boils, purpura and psoriasis. The urine contains less uric acid and more urates; there is less cystitis. Lead and alcohol have much less influence, and over-use and exposure much more. It thus appears as a disease rather of improper assimilation, due to defective metabolism of the proteids at the point of entrance through intestine and liver. This view of the situation permits also the possibility of combined cases, which may fairly be described as rheumatic gout.

ACUTE RHEUMATISM.

Acute articular rheumatism, however, must certainly be given a place to itself. The peculiarities of the polyarthritis, the pyrexia, the endo- and pericarditis, the anæmia, the sweating, the complications, such as chorea, tonsillitis, subcutaneous nodules, etc., all show a sudden

and characteristic difference. And yet the acute form often passes imperceptibly into the chronic, occurs in the lithæmic, and presents many of the lithæmic symptoms in the intervals. It must be admitted, however, that occasionally cases occur which do not show these underlying conditions. But certainly in my experience they are rare, and when present are of the sub-acute variety, or otherwise give rise to the suspicion that they might be more appropriately placed in the ever-increasing class of cases of obscure and even unknown coccic origin. Indeed, in my opinion the balance of evidence even at present is that such is their true position. But real cases may be explained on the basis of some sudden invasion by a more severe proteid irritant, preferably of the nature of a toxin. Now, in most, if not all of these cases, there is a personal factor. In my opinion this is generally, if not always, the rheumatic form of lithæmia, generally inherited. There is also an element of exposure, sudden or continued, to a humid cold or variable atmosphere of a body more or less fatigued. And it is as the combination of these three that I understand and define acute rheumatism or rheumatic fever. No doubt it is difficult, if not impossible, at the present time to definitely assess their different values. But tentatively, the following hypothesis may be advanced as largely, if not entirely, meeting the requirements of the case. In those who are attacked by acute rheumatism, there is (1) an inherited or acquired lithæmia of the hepatic type, in which (2) by exposure of the more or less fatigued body to humidity and atmospheric variations of a certain duration and severity, some of the intestinal germs that have normally to deal directly or indirectly with the peptonisation of the proteids of the food become pathogenic and produce toxins, (3) which are the direct cause of the disease. I am aware that such etiology is somewhat fanciful and far-fetched. But it must be remembered that the explanation of this disease has puzzled every one, from Sydenham, in 1670, up to the present day; that similar pathogenic properties are granted to the diphtheria bacillus, the pneumococcus, and the colon bacillus under atmospheric variations; that gastro-intestinal influenza in the hepatic actually does produce a fever often indistinguishable from acute rheumatism; and that the present hypothesis does harmonise all known facts, as well as the main theories held by different authorities. Possibly, therefore, some modification of it may ultimately prove correct.

GENERAL REMARKS ON TREATMENT.

Very briefly, in conclusion, on general treatment in the light of these general considerations:

(a) A restriction in the amount of proteid in the food is at once suggested. But in practice we must bear in mind the fact that vegetable proteid is less easily assimilable than animal, and that the inter-relations of the other hepatic functions have to be considered. Hence, discretion is always necessary. During an actual attack meat may, no doubt, be entirely cut off; but, in the intervals, as shown by many cases of chronic gout, cholelithiasis, and phosphuria, there may be times and patients who thrive best on a plain meat diet, just as there are others, mostly rheumatic, by the way, who have come to regard a vegetarian diet as their salvation.

(b) The value of plenty of water to flush the system, of free exercise to oxidize the proteids, of free bowels (specially in the rheumatic with the aid of cholagogues from time to time), of free skin action, even to occasional Turkish and hot salt baths, is also apparent.

(c) The importance of protection against chill by clothing and climate is equally obvious. Jäger or the like next the skin, or cellular cloth, where wool is irritant, the use of cumerbunds or cholera belts, and avoidance of variable and damp climates, are thus indicated.

(d) So, too, the frequent use of alkalies, or, as in phosphuria, the occasional use of acids is justified theoretically as well as practically.

(e) The advisability of taking as little alcohol as possible requires no further comment.

PRESIDENTIAL ADDRESS.

(Delivered at the annual meeting of the South Australian Branch British Medical Association.)

By C. E. Todd, M.D. (Brux.), M.R.C.S., L.R.C.P. (Lond.), Adelaide, retiring President.

(ABSTRACT.)

It has long been painfully obvious to me that I cannot hope to give you an address which will be worthy of your attention, or which will compare with the many annual addresses to which I have listened with so much pleasure and so much profit. Many of the men who have preceded me in this chair have been distinguished in some one or other of the branches of medicine, surgery, or gynaecology. Some of these have been specialists. All of them have been able to speak with authority upon certain subjects which they have made their own. Their remarks were always interesting, and very often novel and important. Although it seems to me on looking back such a comparatively short time

since I started practice, and although—absurd as it may seem to the younger members present here to-day—I still seem to myself to be only just beginning my experience, I can, nevertheless, remember almost every presidential address which has been given to this Society. It would perhaps introduce a touch of sadness if I were to mention the men who were prominent when I first joined. Many of them are dead, leaving behind them, as we may hope to leave behind us, names honoured and beloved by all classes of the community—names, indeed, which have passed into household words with many of us. I cannot hope, then, to be able to say anything which will compare with what I have heard in times gone by, chiefly from lack of ability, but partly also because it would be manifestly absurd and presumptuous for one who has been an ordinary general practitioner, in busy practice well-nigh 20 years, to attempt to write on any subject of high scientific interest. My work, such as it is, has been spread over such a variety of cases, and has had such a general basis, and the practical part of it has been so all-absorbing, that I have had neither the chance nor the time to devote myself to the particular study of any one branch of this most exacting profession. A general practitioner, too, who has his fair share of practical work will do well, I think, to devote a large part of his scanty leisure to the cultivation of some attractive hobby, or in that physical exercise and training which we are all prepared to admit are so essential to health. "Those who tend the sick should themselves be healthy," and if a man who is engrossed in medical work spends too much of his time in study and research, his physical health is certain sooner or later to suffer, and he becomes, in consequence, a more learned man, perhaps, but not half so useful to mankind for the particular work he has to do.

The past year, so far as it concerns our branch of the British Medical Association, has been one of peace and sound progress. We have increased our membership by four new members, and our meetings have been exceptionally well attended. I think that our work for the year will compare favourably with the work of any other branch of similar size. We have had no cases to decide involving important ethical questions, which so often do much to estrange friends and to split up a scientific society. At this I greatly rejoice, because I see plainly that in a learned society, no less than in a nation, there can be no sort of progress unless peace reigns. Moreover, however much I may be competent to conduct the general practice of my profession, I confess myself wholly unable to deal with questions of a controversial character. I am truly glad, then, to

think that nothing has occurred during the past year to mar the friendliness and usefulness of our monthly gatherings. We have had again during the past 12 months the inestimable advantage of the clinical and pathological material which the great Adelaide Hospital affords; and the list of exhibits at a few of our meetings would show how enormously this tends to keep the interest of the society from flagging. We feel very much indebted to those members who have resumed work at the hospital for so constantly bringing under the notice of their less fortunate brethren cases of interest which occur in their practice there. We all, I am sure, rejoice to think that the long controversy connected with the hospital has ceased to exist, and that many of the old staff have been able to resume their work there with honour to themselves and great benefit to the institution. We trust that it may be a very long day before any cause of dispute again arises. It would, of course, have been gratifying to all of us if the staff which held together so loyally could have returned to work as a body. But this was manifestly impossible, and I am certain I express the feelings of those who could not return when I say they are glad, without any bitter feeling on their own account, that the long strife has ended.

We may, I think, reasonably hope that the Medical School connected with the University, which has turned out many able men of whom we are justly proud, may again flourish, and the students who were at one time obliged to leave their homes to complete their studies in Melbourne or Sydney may proceed to take their degrees in our own University. It would be difficult to find any medical school of its size anywhere better equipped, or which has turned out more good men than our own; and I would like to take this opportunity of congratulating the University and its professors and teachers upon the marked success of their labours.

I have for a long time regretted the fact that the country members of our branch, who, of course, are very numerous, take so small a share in the work of our meetings. I know they find it difficult, often impossible, to leave their work for a night, but still I think they might make an effort to come more often than they do. Not only would their presence be a great pleasure to us in town, but they would be able to give us the benefit of their experience, gained very often in the management of difficult and trying cases single-handed. In town, where medical men abound, it is always easy to arrange for assistance and consultation in any case of doubt and danger, but in this country a man has very often to operate and undertake cases in which we deem it necessary

to have a second or even third assistant. To have detailed to us the methods of managing such cases, and the various resources which a man develops who has to work alone, would be infinitely instructive and interesting. Perhaps this hint will appeal to some of our members in the country, or, perhaps, my successor in office will be more successful in getting papers from outside districts than I have been. I sincerely hope we may, for they would be greatly appreciated.

The profession in South Australia has suffered many losses by death during the last 12 months. Dr. E. W. Way died, as most of us would wish to die, in the very midst of his active work—in that private hospital which has been the scene of so much of his labour. His name has become a household word in South Australia, and he was one of the founders of this branch. Although he did not of late attend our meetings, he kept up his active interest in them, and it was only a short time before his death that a paper dealing with uterine displacements was read for him. Of Dr. Way's medical and surgical ability it would be presumptuous for me to speak; it was conspicuous to all, and was acknowledged throughout Australia. In that subject which he made his own, and in which he showed such commanding ability, his advice and assistance were very often sought by all of us, and it will be long before his place can be even partially filled. In private life Dr. Way was a most fascinating and affectionate man, and any one who has had the good fortune to be his companion in a yachting cruise will have good reason to call to mind his kindly and buoyant nature. We have lost by death two more of our original members—Dr. Esau, of Woodside, and Dr. McLachlan, of Mount Lofty. Both these men were much beloved by the people in their districts; and, indeed, Dr. Esau, from the strength and kindness of his nature, was looked upon as a kind of father to those among whom he worked. In Dr. Paterson the State lost one who had served long and honourably as Colonial Surgeon. At the time of his death he had given up all public appointments, and was living a life of retirement. I, and I doubt not many others, have felt very much indebted to him, not only for many personal kindnesses, but also for very much help in the particular branch of medicine which he studied.

The beginning of this year was marked by the visit of the Prince and Princess of Wales. Our branch was offered the opportunity of presenting an address to His Royal Highness. This was accordingly done by Dr. W. T. Corbin, at Government House, and a printed reply was sent to the President with the auto-

graph signature of the Prince of Wales. This is an interesting document, which lies among the papers of the branch, and will become of more value as time goes on. Probably it will be many a long year before the direct heir to the throne of Great Britain again pays a visit to our shores, and when such an event does happen, it is very unlikely that a member will be found to present the address who has served as treasurer for the long space of 21 years like our valued friend, Dr. W. T. Corbin.

The last year has witnessed the repeal of the Compulsory Vaccination Act. This retrograde step was taken by the Legislature in spite of the strong protest of this Association, and in defiance of the decided and, I think, unanimous expression of disapproval of the medical world. It is disheartening to find that advances in the stamping out of disease which the process of vaccination brings about should be thus cast aside. The advance has been made so slowly, and with such infinite research and labour, we might surely have hoped that the public would have taken the advice of those who knew most about the matter—of those, in fact, whose great object it is to promote the interests of public health. We might feel more disheartened than we do if it were not for the fact that the first approach of real danger will, I firmly believe, lead to wiser counsels in the future. Even a very moderate epidemic of smallpox would convert Adelaide into a stronghold of compulsory vaccination. To the medical mind its advantages are so obvious as hardly to require stating.

In a review of the year it may, perhaps, be as well to mention the meeting of the International Congress on Tuberculosis, held in London about the middle of 1901. No subject of a medical character has ever excited anything like the amount of general interest among all classes—from the King to the artisan—as the prevention of the spread and the possibility of the cure of tuberculosis. Very much good has, no doubt, already resulted from the dissemination of useful knowledge concerning the nature of this much-dreaded disease. I am not quite so sure that it is for the public good that the average man should know superficially quite so much about a complaint to the possibility of contracting which everyone is of necessity liable. Tuberculosis, having been declared infectious and preventable, every one is driven to think that he must protect himself and his belongings from all possible sources of infection. This he cannot possibly do. He can minimise them to a great extent, but he will be a braver man and a better citizen if he realises that the danger of contracting infectious disease is one which he must of necessity be

constantly called upon to face. The enemies of our health now, in our times of advanced civilisation, are microscopical, but as they are unseen they are apt to produce a terror out of all proportion to their danger. Our ancestors of long ago were threatened by far different and more obvious dangers, such as the assaults from wild beasts and other savage tribes. They, however, had no kind of doubt as to the best means of avoiding such dangers or of combating them when met. They knew quite well that if they kept their minds active, brave and alert, and their bodies healthy and strong, they had done nearly all human beings could do to preserve their health and existence. I venture to think that, although our health enemies are of a totally different kind nowadays, the best means at our disposal of worsting them remain very much as of old. I have been led to say this because I regret to notice among all classes a morbid sensitiveness with regard to disease, and the chances of getting it are becoming more and more conspicuous. It induces an apprehensiveness which does very much to rob mankind of the manifest benefits which have resulted from the increased security of health and life. One often sighs for the simple faith of our forefathers, although their mortality statistics would hardly satisfy a modern health officer. If a man believes that all his happenings are due to the will of Providence, he may not be quite right; but he, at any rate, owns a mind of great simplicity and dignity, and he can go about his work bravely and peacefully, feeling that if illness does befall him he must face it and bear it with patience. The general public would do well to leave the study of health matters and disease processes to those who make it their business in life to thoroughly understand them.

The medical congress in Hobart was the last of the series which was inaugurated in Adelaide in 1887 by our respected colleague, Dr. B. Poulton. I have often thought that the medical profession owes a very great deal to his happy idea, and also to his zest in carrying out our first congress so efficiently in the face of many difficulties. Having regard to the fact that the federation of the Australian States has taken place, it was necessary that the name Intercolonial Medical Congress should be altered, and at Hobart Dr. J. C. Verco, with his usual sense of the fitness of things, proposed that the name in the future should be the Australasian Medical Congress. This proposal was accepted with pleasure, as also was the invitation (which I had the honour to put forward on your behalf) to hold the next meeting in Adelaide in 1905, under the presidency of Pro-

fessor E. C. Stirling. It is a pleasing fact that the first meeting of congress under the new name will take place in Adelaide.

I do not think I need refer in detail to the work of the congress. The discussion on cancer, at which the whole congress was assembled, was, I think, rather disappointing, except for the fact that it brought out a mass of statistics of permanent value from Professor Allen and Dr. Verco. The papers were, necessarily perhaps, of great length, and the time for actual discussion too short. Indeed, this last remark will apply to the papers throughout every congress which I have attended. As we are to have the next meeting here, I think we might be allowed to put in practice the experience we have gained in meetings elsewhere. When papers are so long very few can be read, and there is no time left for discussion, which is very often the most interesting part of the meeting. I think we might make some effort to remedy this state of things in our own congress. Exactly how this should be done is for the executive committee to determine. But I think we might ask members to help us by reading only an abstract of their papers, and by sending their communications to the secretary some time before the actual meeting, so that they could be printed and in the hands of the sections for discussion.

A few weeks ago there appeared in the *British Medical Journal* an article by the President of the British Medical Association. It contained an account of his visit to some American hospitals. I refer to it here partly on account of its extreme interest, and partly because it will give me, perhaps, a chance of making one or two observations on our own hospitals. I was very much struck with the fact that in all the best American hospitals the sole claim to admittance is that a person should be poor, and that he should be sick enough to require medical care and nursing in bed. There are no such things as subscribers' orders, or attempts to get those who can afford it to pay for their bare board while they are in hospital. In America it is felt, and the fact does honour to the nation, that poverty and sickness constitute a sufficient claim for relief. I would like to see such a state of things in every hospital in this land. To my mind a hospital should at all times have wide open doors for all those who are sick and poor, and this without any of the sting of charity about the matter. It is this introduction of the money element into hospital affairs which makes people think that there is still something degrading in accepting help when they are sick and poor. Get rid of all attempts to obtain any money from hospital

patients (of course, those able to pay should be shut out), stop the system by which a subscriber gets so many orders for the payment of so much money, make poverty and sickness the sole claim upon the relief gladly offered by the community, and a large amount of what is called "hospital abuse" will entirely disappear. I can see nothing whatever degrading in a sick poor person accepting help in sickness when he cannot afford to pay for it himself. The community is anxious to succour, and in accepting the relief he is benefiting those who proffer it as much as himself. I know I can answer for it that the best services of this profession are at all times at the disposal of all such as are ill and poor. I would like to see a hospital, then, either completely a State institution or an institution supported entirely by the voluntary contributions of those who can afford to give. Howsoever it is kept up there should never be any question of payment for relief, and those who subscribe must be content with the good they know they are doing, and ought not to expect to receive a *quid pro quo* in the form of so many subscribers' orders. In this connection I was sorry to notice that it is proposed to make the Queen's Home what they call self-supporting. That is, I suppose, an effort will be made to collect from the patients sufficient to keep the institution in funds. I very much regret this. The need for such a home is undoubted, but for many reasons its patients should only be poor—those, in fact, who, but for the Queen's Home, would have to go without medical attendance and skilled nursing. In my humble opinion this home would appeal far more to the sympathies of the generous in this State—it would certainly be far more gratifying to the medical profession—if it took in only such persons who were quite unable to pay any fees. I venture to think, too, that its practical usefulness would be very largely increased.

I was glad to notice in the President's article, which I referred to before, that all large American hospitals have their own ambulance services awaiting to be summoned to any case requiring hospital treatment anywhere in the district supplied by such hospital. In fact, the hospitals provide the means of bringing the sick by skilled hands and easy conveyances from their own homes or from the place of accident to the hospital doors. How this contrasts from the haphazard and even disgraceful methods in vogue in this and other cities of Australia! Here, people acutely ill, people with fractures or injuries resulting from any sort of accidents, are huddled off to the hospital in ordinary cabs, or often in spring drays. Who can estimate the amount of

human suffering entailed in dragging the sick and dying in and out of such vehicles? All of this suffering, too, is absolutely avoidable. If the Government is not prepared to spend the money to buy and properly equip an efficient ambulance service connected with the Adelaide Hospital, here is a chance for some of our public-spirited men of means. The matter seems to me so urgent that I am certain that if the public only realised its necessity money would be speedily forthcoming. Every one of us would help to get it in proper working order. I confidently look forward to the time when near the lodge at the Adelaide Hospital gates there will be an ambulance station, with horses and everything ready for any sudden call, just as the engines of the Metropolitan Fire Brigade now are. Surely it shall not be said as a reproach to us that we take infinite pains to save property, but that we disregard the lives and limbs of our wounded sick fellow-beings. The article I have spoken of gives an interesting account of the lengths to which the American surgeons go in their endeavour to ensure complete asepsis in their surgical operations. Many of these precautions appear to us perhaps exaggerated, and it would be instructive if it were possible to compare the surgical results of a great English with a great American hospital. I was rather amused to notice a diagram in Senn's Surgery, in which, although the surgeons themselves have aseptic caps and wear indiarubber gloves, and although the field of operation has been carefully rendered antiseptic, nevertheless the pubic hair remains unshaved. This is much as though a citizen, fearing that burglars would enter his house, blocked up all the windows and doors in the front, but left the back door open.

There were many things I hoped to be able to say in this address, but time is going on, and I know I must have taxed your patience already too much. I would like, however, to say before resigning my office how very much I appreciate your never-failing kindness and courtesy while I have been in the chair. I feel that I am being succeeded by one whom I have long known and respected, by one who will give his best work to the interests of your branch—Dr. A. A. Hamilton.

Sir J. G. Ward has received a cablegram from the Administrator of Fiji stating that Auckland will be regarded as a port free from plague, with the exception that no hay or litter will be admitted to the islands. Stock and all other cargo may be sent. Sir J. G. Ward had previously cabled the Administrator pointing out that no case had been reported since July 4, and that there was no reason to suppose that an epidemic of plague was imminent, as a careful examination had failed to discover the disease among rats.

ON AIMS AND MEANS IN MEDICINE.

(An address delivered to the University of Sydney Medical Society.)

By R. Scot Skirving, M.B., Lecturer in Clinical Medicine Sydney University, and Physician to the Prince Alfred Hospital.

I MUST first thank you for the compliment you pay me in asking me to address you to-night. I accepted your invitation with many misgivings, for it is not easy in the midst of the hurry of one's daily life to find leisure to think out a suitable subject for such an occasion.

It would, of course, have been simpler to have addressed you on some purely technical matter connected with your work—perhaps a *résumé* of our knowledge on some important subject such as tuberculosis or cancer,—but I am of opinion that each day brings to the undergraduate more than enough of prelection of that kind. I have, therefore, gone further afield—out of the schools, into the larger area of medical life—and I now propose to speak to you

ON AIMS AND MEANS IN THE PROFESSION WHICH YOU HAVE CHOSEN.

Let me begin by saying, in the manner of an aphorism, "that Medicine is a wholly admirable profession, but for the most part it is a poor business."

To accept this view early may prevent much subsequent disappointment in life, and help us to realise that the honest performance of our high vocation is in itself to be a main source of happiness in a career in which you will find there is certainly no lack of sources of unhappiness.

Our occupation holds forth few fat prizes in the way of making what is called a fortune. There are no Liptons or Tysons to be found among the followers of Esculapius. If it be the mere heaping up of wealth that you look for, you had better not seek it in this profession; for, given the same brains, the same industry, and, above all, equal opportunities of advancement, commerce will make you a Sir Gorgius Midas with greater certainty and less travail of soul than the practice of physic will afford you a modest competence.

Nor are you to expect great social success, honours, and sittings in the seats of the mighty. I do not discuss here whether such things are intrinsically worth striving after, whether they are legitimate aims in life. I had rather look on them as kind of hall-marks of honest work, of distinguished professional usefulness, than as of value of themselves.

Remember that "whether men speak well of thee or ill, thou art not on that account other than thyself." See, then, that you try to deserve the former opinion.

However, such honours, if they honour the art as well as the artist, are good and useful recognitions of worth. I am often surprised that they are not more often bestowed on medical men. I imagine the cause of this is twofold—first, our work is, or ought to be, a quiet one. It does not take place on a large stage. The lay papers happily do not often chronicle the sayings and doings of the modest-minded medical man, and, moreover, even the leaders of the profession are rarely rich enough to support embarrassing dignities, or honours which are to be hereditary.

Again, our daily life necessarily cuts us off from certain diverse arenas of human effort. To mix politics with medicine is, as a rule, fatal to distinguished professional learning or success.

Not so with members of the legal profession. With them it is often a stepping-stone to important office, or the acquisition of wealth. There are no Lord Chancellors in medicine, indeed, I question if any medical man previous to Lord Lister has been raised to the peerage for professional merit. Contrast this with the law. If you read "Campbell's Lives of the Chancellors" you will surely take away the impression that a large proportion of members of the House of Lords owe their seats in that august assembly to legal progenitors.

Let us turn to the other side of the picture. This much may a senior say to his juniors: that if it be true that few of the great prizes of the world come in the way of the doctor, it may be said with equal truth that medicine does not compel us who practise it to live only on high ideals and altruistic thoughts and deeds.

On the contrary, I know of no occupation in which the common necessities of life—food, clothes, and shelter—can be so surely gained as by the practice of medicine. I put aside, of course, certain Government employments, and, perhaps, the Church and the Army, where, as we all know, industry, brains, and a knowledge of one's job are not always necessary to promotion. I mean in this connection to compare our occupation with those where personal effort and competition are required to advance the individual. Take the majority of those who practise at the Bar, at engineering, or in a commercial vocation. In all these walks in life you may be capable, well-knowledged, and industrious, and yet the ample hospitality of a public park and an empty stomach may easily be your fate, for people can live without litigation, or building bridges, or selling shares, but everyone is ill sooner or later. In medicine,

therefore, if you are sober, decently industrious and punctual, and are guilty of no gross misconduct, you are practically certain not to starve; and this fortunate state may be reached without loss of self-respect or lowering the dignity of the honourable profession to which you belong.

But, gentlemen, it would be a poor ideal of the value of life to be satisfied with the mere satisfaction of our bodily necessities. Among the educated children of men the satisfaction of the higher emotions is at once the means which makes for much diverse happiness, and the method by which all arts and sciences, all beautiful creations of thought or hand, are built up or made better.

We must, indeed, always regard the advancement of learning as the better part which must not be taken away from us—that higher aim which ought to shine in front of us even in the performance of the meanest offices of the day's work. Our usefulness to our fellow-men and to the common stock of knowledge will surely be best served by personally knowing our work and practising it freely; in other words, deserving and obtaining a practice.

What, then, are the honourable means by which a young medical man gains success in his profession?

ON CONDUCT.

Gentlemen, I believe we shall all agree that in Medicine distinguished success, nay, even moderate prosperity, are rarely gained without at least the outward observances of an upright life. "To the honour of virtue it must be acknowledged that the greatest misfortunes befall men through their vices." Even "hypocrisy is the homage that vice pays to virtue."

Whatever may obtain in politics and in other walks of life, in Medicine, at any rate, one must be fairly well behaved; otherwise the sick and sorrowful will not trust us in their hours of pain and misery. They will not come and pour out their souls in a "kind of civil shrift or confession," to quote the words of Bacon, unless the elements of trustworthiness lie in us. It would ill become such lips as mine to deliver a homily to you on the cultivation of the higher qualities of mind or heart, of honour, of truth, of loyalty, of uprightness. Such matters I deem too high to be handled by those "who have lost sight of the sun in the dust of the racing chariot."

No, gentlemen, to speak to you of those things, to tell you of their paramount importance in the conduct of life, comes fitly only from the lips of few: from among the clergy

occasionally; but the Pascals and Kebles of modern theology are not common. Less rarely, I glory in thinking, from amongst the members of our own profession, for the Pagets and the Listers of medicine are many. Nor are they found only in the leaders of our art. I have met such men in the lowliest ranks of the profession doing their duty in unconscious godliness; men whose lives were an example and an inspiration to more worldly souls to walk in better ways; doctors whose influence for good on their patients could not be measured by their technical skill only; who indeed

" . . . Gild the face that from its dead looks up
And shine on the rejected, and arrive
To women that remember in the night;
Or mend with sweetest surgery the mind."

For me the humbler task remains to indicate some of the common qualities and attainments which lead to usefulness and success in practice.

ON KNOWING YOUR WORK.

It seems almost needless to insist on the importance of knowing the business you profess. I mention it, however, here, and now, because here within these walls and across at the hospital is the place, and now is the time wherein the foundation of all your knowing must be laid. Unless a solid substratum of scientific knowledge is acquired during your years at college, it is hardly likely to be gained later on when butchers' bills and babies are common objects of the domestic day. Such things have been known to obscure the pure radiance of scientific light.

Learn here how to learn. "Believe me," says Sir James Paget, "experience is no natural growth in us; it is not commensurate with age. After about thirty, wise men grow wiser, but unwise men rarely grow wise. Therefore there are many old men with no experience at all. At the right time of life they did not learn how to learn, and ever since, though working in the field of knowledge, working it may be as hard as wiser men, they have only been gathering weeds. Among them are they who, to use a sacred allegory, are constantly sowing tares among the wheat. . . . Your engagement in this profession binds you not only by considerations of your own interest, but by the weightiest responsibility to God and man to do your duty in it with all your might. Keep this constantly in view—daily remind yourselves that you propose to take in your hands the lives and the welfare of your fellow-men. Think quietly what this involves, and then you will daily decide that not even your own lives must be much dearer to you than the duties of your profession."

It is unhappily true that a quite frank ignorance of one's profession, sheer impudence, self-advertisement, or even the less grievous sin of a specially good bedside manner may win men unmerited professional success—that is, a lucrative practice. But such success is built upon a quicksand, and the holders of it are likely to be found out sooner or later. I once asked that most able and delightful man, the late Dr. Fortescue, how a notoriously incompetent practitioner was so successful—a man who, I may truly say, “slew in chariots.” “The secret of his success is simple enough,” said Dr. Fortescue. “He treats his patients with sympathy and with very little else, and they are so filled with his kindness that they never discover his ignorance.”

Success without a fair knowledge of one's work is in truth a poor and unsatisfying condition. However glowing, it is due, for the most part, to the idle talk of a lay public totally unfit to judge of medical merit. How different is the reputation built upon the trust and confidence of your fellow practitioners who constitute the only tribunal competent to judge of professional ability.

But, to be just, we doctors, who are a good deal lower than the angels, have really many encouragements to medical dishonesty, and they must be resisted. Can you wonder, when you look about in the world, “that the supply of rogues is duly proportioned to the supply of fools? For the most part medical dishonesty is but the complement of non-medical folly, therefore till the world at large knows more natural science (perhaps more than is quite good for it) there will always be plenty of success in quackery, self-advertisement and impudence!”

Once more let me quote Paget: “Work,” he says, in an address to the students at St. Bartholomew's Hospital, “life-long work, and so it is and so it must be. There is no success without it, no happiness without it. A kind of success there is, indeed, without it, the getting of money without honour—and to that there are many ways. . . . But we do not teach them here.”

ON THE CULTIVATION AND EXERCISE OF COMMON SENSE.

I regard the possession of what is called common sense as pre-eminently one of the best helps to success in practice. Its value cannot be over-estimated. Its saving grace will help you to avoid making needless enemies, to manage your practice and your business affairs with discretion, and, above all, to make a sane evenly balanced judgment on the diagnosis and treatment of your cases. Many men make shipwreck for the lack of this possession.

In Johnson's “Lives of the Poets” there is a short memoir on Mark Aikenside, a man whose story always seems to me an object lesson on the matter of common sense. Aikenside was a member of our profession, and was on the staff of a London hospital. He was sufficiently versatile to have written the “Pleasures of the Imagination” and a treatise “On the Growth of the Fœtus.” The merits of the former performance were sufficiently prominent to give him the posthumous glory of a place in that roll-call of talent which Johnson's “Lives” perpetuates. What Samuel Johnson wrote of successful practice 150 years ago is still true in not a few instances. Listen to what he says: “A physician in a great city seems to be the mere plaything of fortune; his degree of reputation is for the most part totally casual. They that employ him know not his excellence. They that reject him know not his deficiency.” Aikenside, however, in many ways does not appear to have been wanting to his own success. He placed himself in view by all the common methods. He obtained a Cambridge degree, and was admitted to the College of Physicians. He wrote little poetry, but published from time to time medical essays and observations. He delivered the Croonian lecture, and became physician to St. Thomas' Hospital. All these things he did, gentlemen, and more; “for in conversation he forced himself into notoriety by an ambitious ostentation of elegance and literature.” From all I can learn concerning his life I gather that he never attained distinguished success in his profession; and his failure to do so, in spite of his undoubted talents, I attribute to a lack of common sense: a want of a just perception of the fitness and due proportion of common things. This is evidenced by his total inability to succeed in Northampton, which town “he deafened with clamours for liberty”; and later, in London, where he made himself notorious by “his outrageous and unnecessary zeal” for the same kind of freedom. We well know in these later days that such bellowings for liberty mean for the most part a desire for license, “for innovation and anarchy, with but little care for what shall be established.” I have digressed over this man's career that I might emphasise from the lesson of his life the deep importance of common sense; and further, I think that if you possess a talent or a knowledge outside your profession, you had, perhaps, better hide it from the notice of the public, at least till you are independent of its favour. For look you, gentlemen, Medicine is a mistress whom the public consider must be served with no divided affection. The medical man must be essentially to the general public the man of medicine, and nothing more—at least, I repeat, in the

earlier part of his career. The mother of little Mary or small Tommy cannot possibly be expected to have a proper professional trust in a young man who reads too much Browning or wears long hair and knows his Wagner. He must stick outwardly closely to Gregory's powder for Tommy's stomach-ache, and a nice cough mixture for Mary when she keeps her parents awake with her coughing. Remember always that your future depends not a little on the ignorant verdict of a jury of matrons.

IT IS BETTER TO TALK OF THINGS THAN PEOPLE.

This is another matter which I think makes for success and a peaceful life. I cannot deny that our fellow-creatures are the most interesting things in the world, and sometimes their affairs are not less so. Nevertheless the Apostolic advice, "Look not every man upon his own things, but every man also on the things of others," is an advice which the over-censorious, the tattlers, the scandal-mongers, and jealous persons generally may carry to the most unrighteous extremes. I believe more evil is wrought, more ill-blood engendered, by wasting one's time over the inner business of other folk than is done by any other of the strife-producing factors in professional life. If indeed the actions of a member of the profession are notoriously to the detriment of the body politic, or against the abstract principles of right, then it may be well for us, individually or corporately, to endeavour to get him to mend his ways. I shall, perhaps, have something further to say on this matter in a few minutes. Here I merely wish to insist on the evils of gossip, of a too curious searching into the conduction of one's neighbour's practice. Let a man "look not only on his own things" when thereby he is going to learn what is best in the knowledge and work of his colleague, but let him pass by the small, mean things of life with a kind of mental amblyopia which is both charitable and manly. To talk of things, of knowledge new and old, of books, of by-paths of learning alien to our work, may indeed not have the spicy personality that appertains to the information that "So-and-so has bagged somebody else's patient," and that another man has "undercut for an operation;" but we all know that the former class of subjects make a more wholesome pabulum for the mind—at least so long as the subjects discussed are dealt with in a spirit of good temper, modesty, and fair dealing. Scientific matters are never made clearer by atrabiliousness, self-assertion, or intolerance in argument. *Quot homines, tot sententiæ.* There is yet another manner of talking about people which is even graver than acid tattlings

about brother practitioners. It is when a medical man talks of the affairs of his patients. The confidences of a patient to his medical adviser must be as inviolable as the outpourings of the confessional. The secular absolution which the patient seeks in the consulting-room is as much between you and him alone as that which passes between the penitent and his priest.

You will be but a short time in practice if you turn out true disciples of St. Luke before you find yourselves witnesses of many strange things. The profound issues of birth and death, the passionate struggle to prolong lives which seem so useless to the onlooker, the story of secret sorrows and sleepless pain, the rehearsal of old tragedies, and long-past sins—these, indeed the whole gamut of human passion is at times laid open to your eyes and ears with an abandon and vehemence that has often astonished the self-contained reticent listener. Yet one soon realises that this torrent-like confidence is not seldom a safety-valve, and neither is it rarely a help to the understanding and management of the case. If in the black hour of pain or depression or fear a patient unlocks his heart to you, see that you keep your lips sealed on what he tells you. What incalculable evil, what diffused wretchedness may you not cause by loose speech. What contempt may you not bring on your profession. How much just odium and loss of confidence may you deservedly bring on your head by reckless speech and idle gossip. I think it rare to find one of our number act dishonourably in this matter from pure malevolence or lack of principle. Nevertheless, it is not uncommon for practitioners, usually of a kindly talkative nature, perhaps in the careless freedom of a pleasant dinner, to let slip facts concerning patients which should never have been spoken about. Such lapses sooner or later entail loss of practice. So, from the most selfish motives alone, it is wise to keep a guard on one's tongue.

ON ATTENDANCE AT MEDICAL SOCIETIES.

One of the best means of post-graduate instruction, as well as a legitimate way of introducing yourself to your fellows, is by these gatherings. But beware of making them trystings for mutual admiration. Be sure you go there to learn, and not to air a cleverness and superficial acquaintance with the subject in hand not got by solid experience and patient thinking. Not only is actual professional knowledge increased by taking part in the life of these societies, but other advantages flow from it. You learn to express yourselves clearly and succinctly, and you acquire some

knowledge of the conducting of public business. Steel sharpens steel, and one's mind is stimulated by the intellectual sword-crossing of discussion. Better still, you get to know your fellow-practitioners, and most of them improve on acquaintance. The friction, distrust, and stand-offness engendered by the endless round-about sayings of patients may be swept away in an hour's personal intercourse at a society meeting.

To put it on its lowest basis, no man in medicine can or ought to play a lone hand; and further, believe me, going to society meetings brings you directly in contact with your *confrères*, and, if you deserve it, through them to the public. Therefore, go to them.

The same remarks apply to the social and professional value of consultations. Never resent being asked to have a second opinion. Try to forestall the patient by suggesting it yourself. If you and your consultant are not difficult or impossible people the chances are that you will each make a new friend. Your responsibility is halved, your patient is satisfied, and all is usually well so far as you are concerned.

ON CLOSE OBSERVATION OF PHYSICAL SIGNS AND SYMPTOMS IN DISEASE.

Some three years ago I had occasion to address the profession in Brisbane on "The Influence of Modern Methods on the Practice of Medicine." I then pointed out that the newer methods of diagnosis by bacteriological tests, by electric illumination, by the use of the X-rays, and so forth, admirable and usually conclusive though they are, had a danger in their too exclusive use. I look on their application to the diagnosis of any given case as a kind of coping-stone to an edifice already built, or as an auxiliary to be called in when ordinary methods fail. I therefore beg of you to use your senses—sight, smell, touch—palpate, percuss, auscultate, educate yourself daily in their use, make yourselves good clinical observers first of all, and I doubt not that the excellent opportunities which abound for learning the more elaborate methods of diagnosis, and concerning the vast wonderland of bacteriology, will surely not be neglected by you. I speak here, gentlemen, "not as a reactionary thinking things old are good simply because of their antiquity, or resenting new methods because I object to learning them." No; I am only glad of the opportunity of telling the students of this University—the future practitioners of the Commonwealth—that there are certain risks attendant on successful scientific advance: "Let us hail all new knowledge with acclamation, but let us still hold fast to that which is proven and good."

Close powers of observation, a shrewd, well-balanced mind, having all the senses alert—eye, ear, and hand—will often bring men, not perhaps of the highest intellect, not of the most varied attainments, to the front rank of well-deserved trust and professional confidence with a far more justified certainty than the man who perhaps has a better brain and more theoretical learning, but who lacks the personal factor of common sense and those instincts (animal instincts, if I may use the expression in a nobler sense) which tell him, as Grainger Stewart used to say, "that his patient is evidently ill, that the line of treatment had better be this and that, and the issue of the case will be such and such."

If you are to succeed as practitioners, I ask you to handle a case as our fathers did. Listen well to the history, note pulse, tongue, respiration, smell, temperature; percuss, auscultate. Do all these things, and weigh their result in the balance of common sense. Then, if you cannot arrive at finality, or if you require additional certainty, by all means invoke the splendid help which the labours of the laboratory has put at your disposal. But don't begin the diagnosis of enteric fever by using Widal's test before you have carefully studied the syndrome lying in the bed before you. The stethoscope, even the binaural variety, and the thermometer are not yet ready for that decent burial given to those who have outlived their day and generation.

ON THE IMPORTANCE OF BEING WELL-INFORMED.

I am afraid you may think I half contradict myself when I urge you to strive after the possession of wide knowledge and general culture. If you are lucky enough to be good linguists, so much the better. By all means know something besides your profession. Only don't obtrude the fact, or the public will lose confidence in you.

A French writer has recently insisted on the importance of the practitioner being well educated in a broad sense, so that "the physician may not feel himself standing in an inferior position intellectually to those whom he often attends." I am sure this is true—that is as long as you are not running a fad to death, and so destroying lay confidence. The patient, if he is an educated man, not seldom judges your medical ability, which he is not competent to gauge, by his observation of your general intelligence and learning, on which he is competent to judge. I once while attending a very learned and caustic professor asked him to have a second opinion. A certain practitioner's name was mentioned. "No, no,"

said the patient, "I cannot have that decent ass. Excellent fellow, no doubt; a man who prescribes drugs!"

Moreover, think of the matter in a wider aspect. Sir Andrew Clark used to say that, from a purely business point of view, it was not well to be too intimate with your patients. I daresay there is a large leaven of truth in that statement. But the world has sufficient gloom in it without our wilfully shutting off an avenue to delightful friendships which the relation of doctor and patient not rarely opens.

I think I may say, gentlemen, that, used with discretion, it will not be a hindrance to you in getting practice to possess a well-stored mind and knowledge, which does not hang like rust about you, but can be brought out of the shelves of your memory, to illumine the sombre colouring of a sick man's day, and make the daily dust of life less acrid.

ON THE REFUSAL TO TAKE WORK INIMICAL TO THE WELFARE OF THE PROFESSION.

I am anxious that this address should not partake too much of the nature of "advice to young men." Rochefoucauld tells us that "there is nothing of which we are so liberal as advice," and again, "that we may give advice but we cannot give conduct." I am diffident as to my justification in discussing either. However, when a man has passed through a good many years of practice—house-surgeon, general practitioner, and consulting work—certain lessons etch themselves upon the memory. Some of the lessons I have learned in my career find their expression in what I have just been saying. They have been chiefly concerning things which are helpful in one's daily life, which make for happiness and success.

I feel inclined now, in conclusion, to say a word on things *not to do*. When a student has been capped; has, perhaps, served a year or two as a house-surgeon, he wishes to start in practice. If he has private means the problem is simplified, and the time of waiting made easy. But how about the man who has nothing but his diploma, who has to support himself, and more exigent stimulus still, possibly proposes to clip his scientific wings by a perhaps too precipitate matrimony. How is he going to fare? Well, gentlemen, there are gins and snares in every profession, and one of the pitfalls which is spread to trap the struggling doctor are certain associations or syndicates who sweat the doctor, and wish to appear to be doing philanthropic work. Have nothing to do with them. In saying this I specially exempt the ordinary *bona fide* benefit societies.

I may not consider our relations with them perfect, but on the whole, with a few particular exceptions, the present arrangement works well enough. They are, moreover, what they say they are—true sick clubs to afford the working classes medical attendance at a lesser rate than is paid us by private patients. But the conditions are far different with regard to certain other associations, both here and in other States. Don't take service with them. No, "not even as a temporary stock-pot till the more succulent morsels of private practice drop into your mouths." I specially warn you against these associations, both on general and medical grounds. The New South Wales Branch of the British Medical Association has rightly regarded them, not as true friendly societies, but as bodies inimical to the interests of our profession. Look on them rather as political organisations than as philanthropic societies.

Why, gentlemen, I can conceive of no more unpatriotic associations than those of the type which draw distinctions of birth. Remember also that the best citizens, the highest skill, and the greatest intelligence are not necessarily found only in persons native born. We are all colonists in Australia, Saxon or Celt, native born or otherwise, and subjects of one Empire. Why draw distinctions among a united people? The thing is absurd. Is a man who has spent all his active life in New South Wales a less loyal son of the State, or is he to have less chances as a citizen than the lad whose mother happened to be in the territory at the termination of gestation? Again, I repeat, have nothing to do with such institutions. Else you will soon find that the yoke put on your necks is an intolerable one, and that here, in this State, it will become as much the basil-plant of the profession as its rank luxuriance has proved to be in other States and other countries.

ON THE ABUSE OF STIMULANTS.

This is the last matter of my subject, and I speak of it with hesitancy and some shame. I know not how it may be in other professions, but our profession seems to find a special pitfall in alcohol. I believe the cause is a threefold one. People, in the country especially, think it the right thing to ask us to drink; it is sometimes difficult to refuse. Again, long hours, irregular meals, and exhaustion make the temporary stimulus of alcohol helpful and not unpleasant at the time. Lastly, there is the isolation and mind-starvation which many men, chiefly young and unmarried, suffer from in a lonely bush township. To kill these varied forms of weariness men get into the habit of nipping. I beg of you to realise the pitfall. If

it trips you in your youth, you will surely not gain practice. If it catches you in a prosperous meridian, your sun will set in poverty and shame. I shall say no more; but my convictions on this matter are so strong that I could not, in this place, hold my peace and make no sign.

And now to end. What is the conclusion of the whole matter? You are learning "a divine art, see that you practise it not frivolously." Work honestly for the sake of your patients, as well as for your own success. Judge your own shortcomings as strictly as you are inclined to do those of others, and you shall not greatly err. Be silent, observant, persevering, and temperate. So shall you, perhaps, deserve the high praise given to us by Robert Louis Stevenson. He says that as a class the workers in medicine stand above the common herd. "He is the flower (such as it is) of our civilisation; and when that stage of man is done with, and only remembered to be marvelled at in history, he will be thought to have shared as little as any in the defects of the period, and notably to have exhibited the virtues of the race. Generosity he has, such as is possible to those who practise an art, never to those who drive a trade; discretion tested by a hundred secrets, tact tried in a thousand embarrassments, and, what is more important, Heraclean cheerfulness and courage." Let us each, then, try to understand our duty, to practise it with devotion, remembering always that it is flesh and blood, human hopes and fears, with which we work. To the tearful and the sick, let us strive to imitate that perfect physician, of whom Henley sings, whose—

Faultless patience, and unyielding will,
Beautiful gentleness, and splendid skill,
Innumerable gratuities reply.
Whose wise rare smile is sweet with certainties,
And seems in all his patients to compel
Such love and faith as failure cannot quell.

We are, indeed, not likely to reach these high levels of heart and brain of which Stevenson and Henley so eloquently tell us, and were entitled to tell, for they both drank deep of the bitter cup of physical pain. But the ideal is before us none the less, and we can follow it, even if with faltering footsteps—

"So may you walk this world
Yoked in all exercise of noble end,
And so, thro' those dark gates, across the wild
Which no man knows."

The late Mr. David Cohen, of Sydney, has bequeathed £200 to the Maitland Hospital, New South Wales.

In the metropolitan police district of Sydney there were 1,312 inquests held during the year on the bodies of deceased persons, being an increase of 40 as compared with the previous year. In 91 cases death was attributable either directly or indirectly to intemperance.

THE COMPLETE MASTOID OPERATION WITH THIERSCH GRAFTING.—BALLANCE.

By J. Lockhart Gibson, M.D. Edin., M.R.C.S. Eng., Hon. Consulting Surgeon for Ear and Throat Diseases, Brisbane Hospital for Sick Children, &c.

I AM able to show you to-night an example of the complete mastoid operation as perfected by Ballance. The improvements introduced by him seem to me of great importance, and worthy of demonstration. Although I have reason to believe that his method has been adopted in some of the southern States—for instance, by Dr. Brady, of Sydney—I have not yet seen any record of its practice in our Australian journals. In such an operation four things should be aimed at—

1. Conversion of the mastoid antrum, tympanum, and enlarged external meatus into one cavity, so that every part of this may be permanently open to inspection.
2. The rapid healing and lining of this large bone cavity.
3. Some restoration of hearing.
4. As little disfigurement as possible.

With a fair probability of securing these four desiderata, hesitation in operating upon cases requiring such radical interference would be less common.

My own mastoid work has been mostly in children, and since the publication of MacEwen's work on "Pyogenic Infective Diseases of the Brain" (1893), I have taken this practice as a foundation for the operation, at times trying some of the modifications which have led up to Ballance's procedure. This last appears to me to offer a likelihood of achieving where possible the four points aimed at. In the case I am showing to-night I have been able to obtain such success.

It seems to me that with MacEwen's work as a basis, and Ballance's modifications added, the complete mastoid operation has been made about as perfect as possible.

I do not propose to deal exhaustively with the subject, nor with the indications for operation. The case shown was typically one suitable for it, as a description of its condition, together with its history, will prove.

Ballance's mastoid operation is not only the most radical of all the complete mastoid operations, but it appears to be attended with less disfigurement, and it is followed by quicker healing of the bone cavity than is the case in any other operation of at all as radical a nature.

His modifications of the operation are the following:—

1. The incision, though long, is in the line of the hair, and therefore practically invisible after complete healing.
2. The mouth of the meatus is enlarged, and is so without disfigurement.
3. The posterior wall of the cartilaginous meatus, together with a part of the concha, is displaced upwards and backwards and fixed so as to form the outer and part of the superior wall of the posterior portion of the enlarged meatus.
4. From ten days to three weeks after the operation the essential parts of the granulating walls of the enlarged bone cavity are covered with a Thiersch graft, which, if successful, leads to rapid healing of the whole cavity and its being lined by a thin layer of epithelium.

The steps of the operation will be shortly given in relating the case of the patient I am about to show.

Mrs. X.Y.Z. consulted me first in November, 1892, for pain, deafness, and offensive odour, with slight discharge from right ear. A cholesteatomatous mass was removed from the deep part of the meatus, revealing a 2mm. perforation in the posterior segment of the drum membrane. She had never heard as well with that ear as with the left. After removing the cholesteatomatous mass Politzer's acoumeter could be counted at only one inch. Hearing improved after 10 days to count acoumeter at 18 inches only. It should be heard at over 16 yards. Left ear heard normally. The pain and discharge having been relieved, and discharge apparently stopped after four visits, further treatment was not sought, though advised, and I did not see the patient again until May 15th, 1902, when she was referred to me by Dr. Peter Bancroft, and gave the following history:—Aged 38 years. Right ear has discharged more or less ever since 1892, and she has latterly had indifferent health. Four weeks ago pain commenced all over the right side of the head and in the ear. Pain ceased suddenly six days ago, since when she has been giddy as if seasick, unable to trust herself to walk, and experiencing a constant swimming feeling in her head. If she coughs, sneezes, or blows her nose she "looses all control of her head." Has tumbled down more than once. Very offensive discharge from the ear. She states that it is quite deaf, and it is practically so,

except for bone conduction, which is good. Politzerisation made her so giddy that she had to hold on to her chair. This became less when subsequent inflation forced air out at the meatus. The deep part of the meatus and middle ear were found to be occupied by tough polypoidal granulation tissue, and, upon removing this under an anæsthetic, a large area of bare bone was felt in the middle ear. The clearing out of the middle ear relieved her immediate symptoms, but she was strongly advised to have the complete mastoid operation performed in the hope of permanently relieving her of a dangerous ear. To this she agreed.

On May 21st Dr. Peter Bancroft etherised her, and I performed Ballance's operation. The skin incision commenced above and half an inch in front of the external meatus in the line of the hair, was carried backwards and downwards in the line of the hair, and then forward to the tip of the mastoid. Thereby the skin was reflected for $\frac{1}{2}$ inch, and then all the structures superficial to the bone were reflected right up to the cartilaginous meatus, which was pulled and ultimately dislocated forwards. MacEwen's burrs, which I have used since he recommended them, were employed for all the bone excavation. I can imagine no better instrument. I find that my strong dental engine is sufficient to drive a 6 and a 7 mm. burr, and that this sized burr works quite quickly enough for safety. A surgical engine or an electric motor would drive a larger burr comfortably, and would shorten the operation somewhat.

The start from the mastoid meatus was made as usual through MacEwen's supra-meatal triangle. The antrum was only slightly dilated. It was filled with offensive granulation tissue, and its walls and tegmen were bare and apparently necrosed, but the tegmen was not eroded. The posterior wall of the meatus was burred away, great care being taken to avoid the facial nerve when removing the external wall of the passage between the antrum and middle ear. The next step recommended by Ballance is the removal of the outer wall of the tympanic attic; in other words, the inferior part of the bony roof of the external auditory meatus. This was easily done with the burr. It makes the exposure of the attic much more complete, its drainage more perfect, and its inspection present and future more easy. The mastoid cavity middle ear and enlarged external meatus were so made one cavity. The middle ear was found to have some remains of granulation tissue in its general cavity, and more in the attic, especially in the recess of the aqueduct, viz., in the upper posterior corner of the attic under the tuberosity through which

the facial nerve passes in the Fallopian aqueduct. The granulations were thoroughly scraped away with a sharp spoon, the neighbourhood of the facial nerve being very gently dealt with. The tegmen and the whole bony wall of the tympanum appeared to be necrosed. No ossicles were found at this or at the previous operation. They had evidently come away in the discharge without her knowledge. Following Ballance's plan for the treatment of the cartilaginous meatus, I divided the inferior wall in its whole length vertically, carried the cut well into the concha, with a curve upwards and backwards until it reached the level of the anterior commencement of the helix. The posterior wall of the cartilaginous meatus, together with the small piece of the concha, was then pushed upwards and backwards, and attached by deep silkworm gut stitches to the mastoid flap, raw surface to raw surface. This I found more easy than it sounds. The whole bony cavity was thoroughly syringed out with 5% carbolic lotion, and well swabbed with the same. The whole cavity was packed with a long strip of iodoform gauze, the end of which was brought out at the meatus. The skin wound was stitched with silkworm gut, and a dressing applied. The gauze packing was left undisturbed until the sixth day, when, for the first time, facial paresis appeared, involving both orbicularis and cheek. Removal of the gauze did not reveal any retained secretion, but the only explanation which occurred to me was that the facial nerve had evidently been exposed in its canal by disease of its bony wall, and some of the secretion of the large bone cavity had found its way into the canal and injured the nerve. This seems to me a reason for not always leaving the gauze packing undisturbed for a week; still when removed on the sixth day there was no offensive odour and apparently no pus. The marked facial paresis increased a little and then gradually improved. It was still distinct, however, on the twentieth day, when I did the grafting operation. The stitches had been removed during the second week. The cavity, which was packed afresh each day, became rapidly lined with healthy-looking granulations, even the dense white apparently necrosed bone becoming so covered. The grafting might have been done during the second week, but I feared that placing a graft on the open facial canal might shut in discharge there, and increase the trouble in the nerve. The result showed that grafting would have had a reverse effect. On the 20th day the patient was again etherised by Dr. Turner in Dr. Bancroft's absence. The skin wound, which had healed perfectly, was reopened with

the handle of the knife, and the whole skin-flap with its attached meatal and conchal flap reflected and held well forward. The bony cavity had contracted distinctly in the three weeks. It was well lined by granulations. A Thiersch graft was cut from the well-prepared skin of the patient's thigh with an ordinary hollow-ground razor, floated out in sterile salt solution, and coaxed on to the walls of the bone cavity by means of a narrow spatula and section needles. I found it necessary to apply two grafts, though Ballance prefers to use a single large graft. The parts of the bone cavity specially requiring grafting are, according to Ballance, the roof of the upper part of the anterior wall of the enlarged osseous meatus, the anterior wall of the tympanum, the roof and the internal wall of the tympanum, and the roof and inner wall of the antrum. He does not graft the posterior wall of the mastoid cavity if this be very large, as it is thereby kept unnecessarily big. My grafts covered all these surfaces, and even partly the posterior wall of the mastoid cavity. I found their application a difficult matter, but that when they became applied to the granulating bone surface they adhered very nicely. I found small glass pipettes, as suggested by Ballance, useful for removing moisture from the deep parts of the cavity so that the grafts might become accurately applied. The grafts were smoothed home by round-headed probes and the cavity then showed up, lined by white epithelium. Goldleaf was applied, as practised by Ballance, over the grafts and pressed down in the same way. A thin strip of iodoform gauze was packed very carefully into the now gold-lined cavity, its end brought out at the meatus, and the skin-flap again stitched carefully with silkworm gut. It was noticed that a marked diminution of the facial paresis had occurred when the patient was put back to bed after the grafting, and it rapidly disappeared. Evidently the covering in of the facial canal caused the nerve to recover quickly. On removing the gauze packing on the fifth day on account of its showing stains of apparently decomposing blood, a small shred of sloughed epithelium was found in the anterior part of the tympanum. Apparently it had been part of the graft lying over the Eustachian tube, or, perhaps, over a part of the deep meatal wall, covered by mucous membrane. The cavity looked well, and epithelium seemed to be extending beyond the edges of the goldleaf. The goldleaf was removed five days later, when the whole grafted surface was found to be covered by a white layer of epithelium; in fact, the epithelium had extended to cover the whole cavity. Three days later the gauze packing

was discontinued. There has been no discharge since, and no offensive odour. The superficial layers of the epithelium have peeled off several times, and now the cavity is lined by a pink layer of thin skin. She has had no trouble since the original operation, and gave me no anxiety except on account of the facial paresis, and for fear that the grafts would not take. She had no pain or temperature during healing, and the conchal incision gave me no trouble. The cosmetic effect, you will admit, is excellent, and the other advantages claimed for the method are well exemplified. At the anterior and lower part of the tympanic cavity the tympanic mouth of the Eustachian tube can be seen. The amount of hearing obtained is not unimportant. She can hear with that ear quiet distinct speech, for conversational purposes, at five yards, and my watch (a four-yards one) at six inches, and hearing is still improving. She eats and sleeps better than for some time prior to the operation, and states that she feels in better health and spirits than has been the case for the last seven years.

Fourteen days ago I did a similar operation on a boy aged 13 years, and propose grafting the cavity next week. His course so far has been uneventful. His other ear also will require the same treatment.

[Read before the Queensland Branch British Medical Association.]

SOME INTERESTING SURGICAL CASES.

By **W. J. Stewart McKay, M.B., Ch.M., B.Sc., Senior Surgeon Lewisham Hospital for Women and Children.**

(a) CALCULUS REMOVED FROM THE URETER.

A.B., a muscular navy, aged 37, when coming from New Zealand, was seized with a sudden pain in his left lumbar region. The pain continued for 18 hours, and then ceased. After arriving in Sydney the patient had twinges of pain when he exerted himself, but had no regular attacks of renal colic. His urine contained neither pus, blood, nor albumen. The patient was so afraid of a second attack of colic that he could do no work. As there was no evidence that the stone was either in his kidney or his ureter, I advised him to exert himself so that a second attack of colic might come on, and I put him to cut wood; after ten minutes he was seized with very definite pain in his left lumbar region, the pain radiating towards his left testicle. His urine, however, showed no alteration after the attack.

I admitted him to a room at the Lewisham Hospital that we use for casualty cases, and

proceeded to explore his left kidney. Nothing was found, so the ureter was taken up, and after inserting the whole hand down behind the kidney, it was discovered that a hard body lay some inches below the kidney. As the man was extremely muscular, it was necessary to extend the incision down past the anterior iliac spine towards the internal ring. The peritoneum was then stripped off the lumbar muscles, and after considerable difficulty the stone, lying in the ureter some five inches below the kidney, was brought into view. The ureter was opened, the stone removed, and the ureter stitched by inserting chromic gut sutures through the peritoneal and muscular coats. A long drainage tube was inserted behind the ureter, and brought out at the upper part of the wound, which was then closed in layers. There was some moisture from the tube for ten days, but the patient made a good recovery, and three months later went through the shearing season without inconvenience.

(b) EXCISION OF A CONGENITAL SACROCOCCYGEAL TUMOUR FROM A WOMAN.

A.F., aged 46. The patient says that all her life she has been troubled by the presence of a swelling situated behind her anus. Eighteen months ago the swelling increased very much in size and gave her great pain, until it suddenly burst and discharged a large quantity of fluid. She then went to one of the hospitals in Sydney, where she was operated on, and an attempt was made to remove the tumour; some of the growth was apparently removed, but the greater portion was left behind.

When I saw the patient she had been discharged from the hospital for some 17 months, and on examining her I found that between the coccyx and the anus there was an oval-shaped opening in the skin three inches in length and an inch and a half in width, and through this opening an irregular elastic mass was protruding, from which a glairy discharge issued. On inserting the finger into the rectum it was found that the mass was situated in the hollow of the sacrum posterior to the levator ani, and as the growth had increased it caused the whole rectum to assume an S shape, the lower portion being pushed forward into the pouch of Douglas until it had come into contact with the fundus of the uterus. The patient stated that she had had no difficulty in relieving the bowels at any time.

After treating the patient for a week with hot boracic sitz-baths to endeavour to get the parts clean, she was placed in the lithotomy position, and the table was slanted so that the patient's head was much lower than the

sacrum. An incision was carried from the anterior end of the opening (through which the tumour projected) towards the anus, and another incision was carried from the posterior angle back over the coccyx. The tumour was then dissected out of its bed, care being taken not to injure the rectum.

After removing the tumour, a cavity was left large enough to insert a cocoanut, and this was packed tightly with iodoform gauze; the edges of the wound being brought together with silk-worm gut, and collodion applied so as to prevent the wound being contaminated by faeces.

Two days later the gauze was removed, but this was followed by such severe hæmorrhage that after irrigating the cavity I had to inject hazeline, and apply pressure by a pad and a T bandage. The incision healed by first intention, but it was necessary to irrigate and drain the contracting cavity for nearly two months. At present the patient is in excellent health; a small sinus alone remains, from which a little glairy fluid comes every day.

In this region of the body we encounter post-rectal dermoids, thyroid-dermoids, and congenital sacral cystic tumours, due to dilatation of the terminal portion of the spinal meninges. The tumour removed was a thyroid-dermoid, which, as Bland-Sutton says, in structure resembles the thyroid body, being composed of closed vesicles lined with glandular epithelium, and containing glue-like fluid. Their origin in this situation is explained when we remember that this is the situation of the post-anal gut which originally connected the spinal canal and the gut lying anterior to the proctodæum.

(c) SARCOMA OF THE HUMERUS REMOVED BY THE INTERSCAPULO-THORACIC AMPUTATION.

The patient in this case was a lad, aged 11 years. The history was that five weeks previous to his admittance to the hospital he had fallen on his shoulder from a cart. A few weeks after the accident a swelling was noticed about the deltoid region, and this increased in size, but he suffered little or no pain. Not being willing to do an extensive operation on the boy, as it was his right arm, without being absolutely sure of the diagnosis, I made an incision into the tumour and removed a small portion of it, and Dr. Burfitt having cut sections pronounced it to be a sarcoma. The interscapulo-thoracic operation was then performed, the subclavian artery being tied and the axillary vein tied after the pectoral muscles had been reflected. The patient recovered.

I wish to bring this case forward to-night to suggest that in future after the clavicle is

removed that much time can be saved if the subclavian artery is not tied.

This view of the operation has been forced upon me lately after having had occasion to perform a series of Halsted's operations for the removal of malignant growth of the breast. In all of these cases, after reflecting and removing large portions of the pectoral muscles, the axillary veins and artery have been laid bare from the clavicle outwards; and in all of these cases both vessels could have been ligatured with great ease.

I would therefore propose that the steps of the operation should be as follows:—

1. Reflection of the periosteum from the clavicle: This step has been ridiculed, inasmuch as it is urged that it is absurd to take the trouble to reflect periosteum which is about to be removed. In reality the reason for reflecting the periosteum is that the clavicle may be removed with consummate ease, and the periosteum and subclavius can then be removed later on.



2. After removing some portion of the clavicle an incision is carried from the centre of the clavicle outwards, and the pectoral flap is formed, as laid down in the steps of the classical operation. The cephalic vein is severed, and the pectoralis major is then reflected and held aside by an assistant. Hæmorrhage will come from the muscular branches, and also from the acromial and humeral branches of the acromio-thoracic axis.

The surgeon is now on a plane where he encounters the pectoralis minor, having to its outer side the suspensory ligament of the axilla, and to its inner side the clavi-pectoral fascia; the latter being pierced by the acromio-thoracic axis.

The pectoralis minor is divided close to the coracoid process, and the clavi-pectoral fascia having been reflected the axillary vein and artery are exposed; the former being ligatured first and then divided, after which the artery is dealt with. I think that will be an advantage to tie the artery below the point where the acromio-thoracic axis is given off, so that we may preserve a good blood supply to the pectoral muscles.



After this the nerve cords are divided. The index finger is then placed under the subclavius muscle and the clavicular periosteum and the subclavius are divided, care being taken to seize the supra-scapular artery.

The operation is then proceeded with in the manner indicated in the classical description.

There is one point about this case that I should like to bring forward, and that is the very rapid development of the sarcoma after the injury.

During the last twelve months I have observed the same thing in three other cases.

In the first case a young lad injured his knee-joint, and a sarcoma developed soon after, and I had to amputate his leg through the thigh. He recovered.

In the next case the lad was kicked in the back of the thigh by a school-fellow. In three weeks' time there was a well-defined lump that increased rapidly. I removed the leg at the hip-joint, and the boy recovered. Dr. Jamieson and Dr. Burfitt both examined sections of the growth, and pronounced it to be sarcoma.

In the third case a young woman had a fall from her horse. A lump was observed soon after on her back below her scapula, where she had been injured by the fall. I removed a portion of the growth, and found it to be a sarcoma, and then proceeded to remove the whole growth, and at the completion of the operation there was a cavity left in her back, over the lower ribs on the left side, into which a soup-plate could have been put without difficulty. The patient recovered.

I am fully aware that *post hoc, propter hoc*, is a method of reasoning that is liable to lead one to the most fallacious conclusions; but these cases must direct one's attention to the fact that there may be some causal relation between traumatism and the development of a new growth.

(d) EXCISION OF THE CÆCUM FOR MALIGNANT DISEASE.

The patient in this case was a woman, aged 72. Some months before she came to the hospital she noticed a movable lump in her right side. She consulted a country practitioner, and he told her that he thought she had a floating kidney. As the lump gave her little inconvenience and pain, she took little notice of it. Six weeks before the operation she had a severe attack of diarrhoea, and since that time she had begun to lose flesh. She suffered from dyspepsia, but she had not passed any blood at stool.

On examination a distinct lump could be felt in her right side, situated in the region of the cæcum, the impression conveyed being that the lump was freely movable, and this had deceived the country practitioner into believing that he was dealing with a floating kidney—a mistake that has been made by other men. In reality the greater part of the tumour was quite fixed, as it was situated in the posterior wall of cæcum, and was adherent to the iliac fascia. Portion of the growth had extended to the anterior wall of the cæcum, and as the bowel had a certain range of movement the impression conveyed was that one was about to deal with a movable tumour. An incision was made over the tumour in the line of the ascending colon, and when the growth had been examined by Dr. Barrington and myself we saw that if some form of operation was not performed that the bowel would soon be

occluded. I therefore determined to remove the cæcum.

The operation was commenced by tying off the medium layer of the mesentery, beginning from the ascending colon and working across to the ileum. This step was not easy, as the great omentum had become adherent to the bowel in this region, and there were several glands that had to be removed.

When the mesentery had been dealt with, a piece of gauze was tied around the ascending colon, and a pair of forceps were placed in the portion of bowel about to be excised. The ascending colon was then severed and the growth was freed from the iliac fascia, and the lateral layer of the mesentery of the colon was ligatured. The last step was to divide the ileum.

After the divided edges of the mesentery in the angle between the colon and ileum were sutured together, and when the large and the small intestine had been drawn through the incision they were united to one another laterally, so as to resemble a double-barrel gun, one barrel being much larger than the other. The next step was to close the peritoneal cavity, first suturing the peritoneum and then the muscles.

Nothing remained now to be done but to insert into either end of the bowel a Paul's tube, to which was attached a rubber tube. The skin incision was closed by interrupted silk-gut sutures.

The patient's pulse and temperature ranged between normal and 100° for the first seven days after the operation. On the evening of the seventh day the pulse began to fail, and the patient died on the morning of the eighth day.

I held a limited post-mortem examination, and found that there was some gangrene in the ascending colon; there was some local peritonitis, but the cause of death was probably exhaustion.

Excision of the cæcum for malignant disease is a very fatal operation, as the following table, compiled by Coley, will show:—

Krönlein	12 cases, with 6 deaths, 50%
Körte	19 " 7 " 36·84%
Czerny	10 " 5 " 50%
Billroth-Salzer ..	10 " 6 " 60%
König	7 " 4 " 57·1%

The mortality is thus 48·4 %

Many factors go to contribute towards this great mortality. Usually the growth is not discovered until it has made considerable progress, consequently the operation is always attended with severe shock, and the histories of reported cases show that many of the patients die during the first 24 hours following on the operation. Of those that live longer some die of gangrene of the bowel, others die through defective anastomosis. To ensure success it is not sufficient that the tumour should be removed;

we must take every precaution that we have not interfered with the blood supply of even a small part of the bowel.

I have during the last six months had two other cases which illustrate how this interference with the circulation will mar our results. The first case was that of an old man, aged 75, from whom I removed a portion of the stomach and pancreas, great omentum, and malignant glands. He progressed favourably until the fifth day, when an enema was administered, and he immediately complained of pain about the umbilicus. I opened the incision, and found that the fluid had escaped through a small gangrenous patch in the transverse colon, and he died of shock. I had evidently interfered with the blood supply to a small segment of his transverse colon. In the next case I removed the rectum by Kraske's operation. A few days later I noticed that the bowel which had been fixed so as to form a sacral anus was gangrenous on one side. This infected the wound, and prolonged the patient's time in bed for some weeks.

I think that if I am called upon to perform excision of the cæcum again that I shall practise lateral anastomosis, according to Halsted's method. I have tried this plan on a dog, and have been much struck by the firm union that is obtained by this procedure.

There was one event in the after-treatment that was of interest. As the patient vomited frequently I resorted to rectal enemata, and I soon discovered that if a rectal enema of a few ounces was administered that it soon made its way round the colon, and was discharged by the glass tube in the end of the ascending colon. This same result has occurred in my practice lately. After operating on a case of appendicitis a fistula connected with the cæcum formed, and I noticed that if a small enema was administered it was quickly discharged at the fistula. I tried a series of experiments and found that 15 grains of salicylate of bismuth introduced into the rectum in a few ounces of water was discharged in 2½ hours through the fistula. This was either due to a anti-peristalsis or to the swaying movements (pendelbewegungen) of Ludwig.

(Read before the New South Wales Branch of the British Medical Association.)

At the last meeting of the Women's Hospital Committee a communication was received from Dr. Springthorpe on the subject of affiliation with the Victorian Trained Nurses' Association, in which it was pointed out that, unless the committee agreed to the proposal, it would be necessary to make arrangements with other hospitals. The Women's Hospital would then be eligible for the registration only of trainees as midwifery nurses. It was decided to proceed to affiliate with the Victorian Trained Nurses' Association.

SOME METHODS AND RESULTS IN MINOR SURGERY.

By C. S. Hawkes, M.R.C.S. (Eng.), L.R.C.P.S.
(Lond.), Brisbane.

NEARLY 500 years ago there lived in France a very clever surgeon named Ambrose Paré, the most brilliant and successful operator of his day. Unfortunately, in spite of his brilliancy, some of his patients used to die, which annoyed Ambrose Paré as well as his patients, so when he was proceeding to operate he went to his patient and said to him: "Now, I will operate on you, and God will cure you." This division of labour was eminently practical and successful. If the patient recovered, so much the more credit to Ambrose Paré; if he died, that was nothing to do with Paré, as he had already assured the patient that the after-treatment was in other, and possibly better, hands. If the patient's friends expostulated, well, who were they to be interfering with the decrees of Providence? So everybody was satisfied, more or less, and Ambrose Paré went about his business and operated as he thought fit.

Unfortunately, nowadays this proceeding has become obsolete, and our patients hold us responsible for the after-result of our operations, so that perhaps it will not be amiss if we consider a little and see how our operative interference affects the economic condition of our patients, and how that again will affect us as practitioners. I have often noticed that with so-called "major" surgery, we are more definite and can give a better prognosis as to ultimate duration of illness and after-effects than with smaller operations. We can tell almost to a day when an abdominal section will get up, when she will leave hospital, and make a fairly close approximate when she will be fit for light work. We are not nearly so exact with, say, a bad whitlow or a fistula. I think this is perhaps because methods in "minor" surgery vary so much. One man will poultice an abscess, until by effluxion of time it bursts through the skin; another will open it at once and treat it antiseptically. These two men's results, both as regards time and after-effects, will be widely different. Suppose, for the sake of argument, A and B each earn £5 per week, and both get a whitlow. "A" poultices it till the abscess has almost burst, has it opened with a small puncture, through which, by the expenditure of a considerable amount of physical force, a large quantity of pus is extruded; he then sits down placidly and waits for a long tedious suppuration, with possible necrosis of the phalanx, to take place. "B" goes to his

surgeon, who opens and scrapes it at once, treats it antiseptically, probably avoids necrosis, and gets quick healing. "A" returns to work, possibly with a damaged finger, in six weeks; "B" in two. Now, see how this affects them pecuniarily. "A" has lost £30 in wages against "B's" £10; therefore "A" is £20 to the bad by the method of treatment employed as compared with "B." Suppose for the sake of argument, each pays his doctor £10; it would be better for "A" to pay his doctor £15 and get well even in three weeks—he would then be £10 to the good—than to be kept under treatment for six weeks. More and more, I think, patients are recognising this, and want to know how long they are going to be laid up, so that it behoves us now and then, so to speak, to take stock and see what methods we have got, and what results we get out of them. Sooner or later, the man who gets quick results will score over his colleague who gets slow ones, provided that his ultimate results are equally good.

As it is, of course, impossible, in a short paper, to deal with the whole range of minor surgery, I would ask you to discuss two conditions only, in both of which several methods are employed, and in which I have observed widely divergent results, both as regards time and after-effects. The two I propose to take are hydrocele and hæmorrhoids, both common conditions requiring operation, which is performed frequently by almost every practitioner. The operative treatment of hydrocele is interesting in that it marks fairly accurately the onset, rise, and more modern improvements in aseptic technique.

At first surgeons were afraid of a wound, so they injected a fluid subcutaneously. Then came the time when they made a simple incision, and prepared to see it heal by suppuration; lastly came the aseptic methods of dealing with the sac, the success of which depends on the thoroughness of the technique employed. Now, in considering each class of operation it is well to bear in mind at least three points—first, the completeness of the cure; secondly, the time which it takes; and thirdly, the freedom from untoward complications or after-results. Simple tapping may be dismissed as merely palliative; it rarely if ever cures, excepting in a few very old people. Next, the method of treatment by injecting some irritating fluid into the sac must be considered. The idea is that after the hydrocele fluid is drawn off some irritating fluid should be thrown in, which sets up an inflammation of the walls of the sac, causing fresh fluid to be excluded, and when this is absorbed the inflammatory exudate glues the two layers of the sac together and causes obliteration. Many fluids have been advocated for this purpose. The two that have remained

in favour the longest are some strong preparation of iodine and carbolic acid, mixed with either a little glycerine or water. The technique of injecting is very simple. Its efficacy, however, depends on accurately observing one or two points. Firstly, the sac must be completely empty or the remaining fluid so dilutes the fluid injected that it may not cause sufficient reaction; secondly, the injected fluid must be well distributed by manipulation over the whole of the sac; and here it is perhaps well to bear in mind that in all these cases the cord must be carefully examined beforehand, for every now and then a patent process extends from the sac up to the abdominal cavity, where it is not advisable for an irritating fluid to penetrate. If things go on well after injection, a more or less severe inflammation is set up with exudation of new fluid, re-absorption, and cure in about three to four weeks. The supposed advantages of this proceeding are that there is no cutting and no anæsthetic is required. The disadvantages are many. If the sac has thick walls, the treatment is useless; if the injecting fluid is not strong enough it will not cure because it will not cause enough reaction, and either no adhesions will result or only a few scattered ones, forming loculi in which fresh fluid accumulates, forming a loculated hydrocele, and the last state of that man will be worse than the first. Or there may be too much reaction and a severe orchitis or even suppuration is set up, which results in a long tedious illness. Failure is not uncommon. In 137 cases in two series of statistics there were 38 failures, 25 of which had had more than one injection, and some of these had eventually to be operated on by other methods to obtain a cure. The carbolic acid injection is less painful, and perhaps on the whole gives better results, but the number of failures is very large, 11 out of 87 injections in one series. The disadvantages of this method much more than counterbalance any advantage, substituting a more or less violent inflammation that one can only with difficulty control, for a simple benign non-inflammatory condition does not seem to me to be in accordance with the canons of good surgery. Treatment by simple incision is still often tried. This simply means making a cut somewhere through both skin and sac, perhaps removing a little bit of the latter and allowing the cavity to granulate up. It frequently fails and the hydrocele re-forms. It is always tedious, and if in order to expedite matters the sac is plugged, acute orchitis is the usual result.

The next method of operating that was employed was to cut away part of the sac

after incision and suture the edge to the skin. This was known as "Volkman's operation," and even in his hands there were from 12 to 15% of relapses. Block modified this a little by cutting away a little more sac and painting over the rest with nitrate of silver or carbolic acid, yet he got about 5% of relapses, though his patients, he says, were as a rule able to return to work in from two to three weeks.

The most radical method of operating is, of course, to remove the complete sac, and in some severe cases with large thickened sac walls it is the only plan that will give an ultimate good result. The proceeding, however, is a severe one, with a decidedly high percentage of complications, at least 10%, but practically no relapses.

The most modern method of operating is a procedure first brought into prominence by a French surgeon called Longuet. It consists practically in turning the serous sac inside out and so destroying the secreting membrane. The operation is a simple and quick one. An incision is made over the middle of the sac, enlarging it so as to expose it completely, and the unopened sac is isolated from its bed. It is then opened and turned inside out, being secured in its new position by a couple of fine silk or catgut sutures passed through the inverted sac close to the epididymis, so as to keep the sac inside out. It is then replaced in the scrotum, and the skin wound closed with a few sutures. There is practically no reaction. A slight swelling is sometimes noticed for the first two or three days. Healing takes place, as a rule, within a week, and the patient is able to get about in this time. Longuet published 22 cases of over two years' standing with no relapses and no serious complications.

During the past 18 months I have done the operation seven times; in no case was there any severe swelling or complication, and in all the cure was satisfactory. In cases where the hydrocele was large I have been in the habit of tapping a week or ten days previous to operation, so that the size of the sac may be less, and sometimes combined with inversion a partial excision of the sac. Dudley Tait has modified this operation slightly, making it, if anything, more simple. He makes a straight cut right into the sac through the skin, then turns it inside out, and separating one wall of the sac from the skin and subcutaneous tissue, replaces the testicle in its new bed. This, he claims, can nearly always be done without general anæsthesia. It certainly can, for I have done so; but in the three cases in which I employed his method with infiltration anæsthesia, if the patients had not been more than usually tolerant I do not think they could

have stood it. However, the results, as regards cure and freedom from pain and complications, were everything that could be desired.

Balancing up, then, for and against the various methods we get the following results:— Iodine injection gives 15 to 30 % of failures, often a long absence from work (three to four weeks, at the least), and sometimes severe complications.

Carbolic acid is rather better, with 10 to 12 % of failures and a fair percentage of serious complications.

Incision simply is uncertain and tedious, with 12 to 15 % of failures.

If part of the sac is removed as well, it reduces the failures to 5 %, the patients being able to get about in three weeks on an average.

Complete removal of the sac means at least three weeks' rest, with severe complications in at least 10 %, but with very few failures as regards ultimate cure.

Eversion of the sac means rest for a week or ten days, very few complications, and very few failures. On the whole it may be looked upon as the best and most reliable operation up to the present.

Turning now to the subject of hæmorrhoids. On looking through the literature on the subject, I have collected 17 methods of operating, most of them unreliable, and the very diversity of the methods advocated shows that there is no definite opinion as to which is the best. However, as it is not necessary to weary you with the recapitulation of 17 different methods, varying from gymnastics and massage up to excision of the mucous membrane of the rectum, I would ask you to discuss only a few of the more generally used procedures, six in number. They are:—

1. Simple stretching
2. Injecting
3. Crushing
4. Cauterising
5. Ligature
6. Whitehead's operation.

Many years ago a French surgeon, Verneuil, evolved a very pretty theory of the etiology of piles. It was very ingenious, but quite incorrect, and his deductions therefrom were equally erroneous; but the method of treatment that he advocated is still the basis on which depends the success of almost every method of operating for piles. He insisted that thorough stretching of the sphincters would cure all cases of piles. It will not, but it is the greatest help in almost every operation, except in those rare and severe cases where the sphincter is already too weak and lax. It is perhaps lost sight of nowadays that

simple thorough stretching of the sphincters is sufficient in most cases to effect a cure, but it is a fact worth remembering, for it does not cause a patient to lie up, and it can also sometimes be done with care without a general anæsthetic. I have done this several times with cocain anæsthesia only; it takes time, for the stretching must be gradual and gentle but continuous, and the piles must not be inflamed; first one finger is introduced, then two, then the two forefingers, which are gradually and gently separated, being changed from point to point on the sphincter, so as to get a steady uniform dilatation. One must be prepared to spend from 15 to 30 minutes over it, but it is worth the trouble, and often gives most marked relief. The fingers are better than any instrument, because they give a variable and more accurately regulated pressure. It is a very old plan, but an old plan that I think is worth remembering.

There is one class of apparently very mild pile in which one cannot employ it, and where it is very necessary to recognise the exact condition: I mean where a simple rather troublesome pile marks the fact that behind it there is a fissure or ulcer. This sort of pile is interesting, inasmuch as its pathology is different from all other piles. As you may remember, the rectum is developed as a closed sac, which pushes its way down, taking with it its own blood supply, and joins with another process pushing its way up at the anal depression. If these two processes do not join, imperforate anus results, and when they do join sometimes the union is not neatly finished off, and a little of the dividing membrane remains, forming the so-called, and very variable, anal valves. If, as easily happens, one of these gets torn and pushed down, it forms a kind of fissure or ulcer, and with it is usually associated a so-called "sentinel" pile. It is no good trying to stretch one of these cases; the pile must be removed, and the ulcer cut across, when the result is invariably satisfactory.

Now, a procedure that has been very extensively advocated for piles is injecting them, and this more especially in America. The fluid that is chiefly used is carbolic acid with glycerine and water of the strength 1 to 10 or even 1 to 5. The way it is used is to give an enema, then get the patient to strain so as to protrude the piles, paint them over with cocain, and with a hypodermic needle inject slowly a few drops into the centre of each pile. These two points are of the greatest importance; if the injecting is not done slowly the fluid will not diffuse and sloughing will certainly take place; and so it will if the fluid is not injected right into the centre of each pile. In cases

that do well this causes thrombosis in the vessels of the pile, the thrombus gradually shrinks, and with it the pile, and cure takes place. But the injecting may have to be done several times, so that the treatment may have to be repeated at fortnightly intervals for 10 to 18 weeks; neither is it quite safe, for death may even take place, and all sorts of complications may ensue, such as embolism, abscess, fistula, hæmorrhage, and others. In 3,300 cases reported from American sources there were 13 deaths, and bad results and complications of some sort in 170; that is to say, in from 5 to 6 % some untoward result ensued; so that though the treatment seems very simple and easy, it is by no means as good as it looks: it is very tedious, not always certain, and undeniably risky. Allingham's comments on this method are worth quoting. He says: "This method is no permanent cure; it is midway between palliative and radical treatment; that is to say, may stop bleeding, and even diminish prolapse for a time, but never, except sloughing takes place, eradicate the pile."

Turning now to methods that are designed to get rid of the piles, two that have had many rises and falls in favour are crushing and cauterising. Crushing is done with some form of screw clamp—perhaps Allingham's is the best. To get the best results from this method, its limitations must be closely observed. The sphincter must be first well dilated so as to get at the pile; the piles must be few, for as a big lump of tissue is taken up, crushing many would cause too much after contraction; the instrument applied longitudinally, not transversely, to the long axis of the bowel to avoid contraction, and the pressure of the clamp must be kept up for 1 or 1½ minutes to ensure freedom from hæmorrhage. There is said to be less pain from crushing than after ligature. This is not always the case, and if cases of only equal severity were taken I think the advantage would be with the ligature. About the same liability to after-contraction exists as after ligature, and less than after the methods of cauterising. The cautery has been often advocated in some form or other as a good method of treatment; the pile is held in some kind of clamp, and it is seared down till only a stump remains. Now, a burn always takes longer to heal than a cut, so that it does not seem quite the best treatment to put a burn in the rectum to heal up instead of a small, clean wound; and, besides, burns cause a good deal of contraction in healing, which may narrow the rectum too much and cause stricture. There is, however, one class of case in which the cautery methods are very useful: this is

when the sphincter is very lax and dilated, for here the much greater contraction that takes place as the burn heals up is very useful in lessening the calibre of the too lax anus; otherwise there seems to be very little to recommend this method. The most generally useful method of operating is by ligature; but there is a very great difference between using a ligature properly and improperly, both as regards freedom from pain, quickness in healing, and freedom from after-results. Probably most of us can remember piles being operated on 10 to 15 years ago. The pile was pulled out with a hook or vulsellum; a piece of thick waxed silk or cord, strong enough to hold an angry bull, was tied round a big chunk of tissue, tightened with the full force of a muscular surgeon's arms, the ends left long and hanging out of the anus for an inquisitive dresser to pull on daily to see when they would come away; a morphia suppository was inserted and the patient put to bed. Afterwards he invariably got retention for the first day or so. That is how not to apply a ligature. Treatment by ligature is infinitely simplified if one remembers two points. The first is the anatomy of the rectum as regards the blood vessels; they run under the mucous membrane parallel to the long axis of the rectum, so that, as a pile is formed by fecal boluses pressing down to the anus, the blood vessels in the pile being the toughest structures yield last and are consequently always on the upper surface of the pile, so that when one wants to tie a pile it is possible to cut it almost away from below up, till only a thin little pedicle on the upper surface is left, which contains all the blood vessels, and this can be tied with very thin silk, leaving only a very small strand of tissue to be cut away. The second point to remember is that rest of a part is necessary for quick healing, and to ensure this it is requisite to thoroughly and completely dilate the sphincters so that for a time they shall be practically paralysed. Doing this thoroughly makes an enormous difference to one's patient in lessened pain, lessened liability to retention, and quicker healing. Stretching the sphincter thoroughly is sometimes very tedious, but it is well worth the time expended on it. The two thumbs should be inserted and separated gradually till the sphincter can be felt to yield gradually in every direction. In some books dilators are recommended for the purpose, but no stretching dilator is endowed with the tactile sensibility of the fingers, and all these mechanical contrivances are best avoided. When the sphincter is well dilated the piles protrude easily and each one has a forceps clipped on to it, so that it will not get overlooked afterwards. There are several little modi-

fications in ligaturing; a very good one is to reflect a flap of the mucous membrane from the side of the pile, then cut from below up till a thin pedicle is formed; ligature this off and sew up the flaps parallel to the long axis of the rectum with a continuous suture. Too many piles must not be taken; a good rule is to leave at least a quarter of the circumference of mucous membrane uninjured, or stricture may result. This latter complication can often be lessened by passing the finger daily during the end of the healing process, and a rule that should never be forgotten is to always pass the finger at the end of treatment to feel that no stricture has resulted. Another method of modified ligature that often gives very good and quick results is to clamp the pile—of course parallel to the long axis of the gut—with a long bladed forceps, and then sew the tissue through and through with a double continuous through and through stitch behind the blades of the forceps; cut off the part clamped by the forceps and set free the stump; if the stitching has been properly done only a linear closed wound remains, which heals quickly; but the trouble is that if the stitches, especially in the upper part, are not carefully and tightly applied, some vessel is likely to slip and bleed. The most radical method, however, of dealing with piles is Whitehead's method of removing the whole or part of the pile-bearing area; that is to say, after well stretching the sphincter, the mucous membrane is separated close to its junction with the skin, dissected off the underlying tissues up the bowel as far as necessary, cut off, and the edge stitched to the anal margin, for, as you remember, the vessels run just under the mucous membrane, so the hæmorrhage is not great till the mucous membrane is cut across, and this is done little by little as it is sutured, so as to minimise the hæmorrhage. If primary union takes place the result is very good, but the operation is a much more severe and tedious one than ligature, and perhaps best suited for cases where the piles are so numerous that ligatures cannot be thoroughly employed. Now to consider the pros and cons of these various measures. First, as regards prospect of cure.

Simple dilation of the sphincter will cure slight cases, relieve moderately bad ones; is useless in inflamed or severe cases.

Injecting will relieve a large number; will cure a much smaller number.

Crushing and cautery will cure in suitable cases, but the cases for which they can be best used are strictly limited, and in order to get the best results the piles must be few, isolated, and not too big; the cautery perhaps giving the best result in cases with a very lax sphincter.

Secondly, as regards quickness of cure.

Simple dilation does not cause more than a few hours' discomfort; if employed in suitable cases the patient need not lie up, and relief is usually obtained in a few days.

Injecting, if the case does well, causes but little inconvenience, but the duration of treatment is long—at least two to three months, except in some very slight cases.

Cautery and crushing about equal in slight cases, healing takes place in two to three weeks; the cautery if employed freely is much slower, from three to six weeks before healing is complete.

Ligature varies very much according to the care taken; if the pedicles tied are small, and especially if mucous flaps are made and sewn together, healing takes ten to fourteen days; if large pedicles are tied, two to three weeks; it being remembered that getting about too soon delays healing, and that thorough dilation of the sphincter conduces to quick union.

Whitehead's Operation.—If primary union takes place, healing takes about a fortnight; but patients do not care about getting about much for another week or longer.

Thirdly, as regards complications and mortality.

Simple stretching cannot be said to have any complications, and, with the exception of the anæsthetic risk, no mortality.

Injection.—Bad results in quite 5%; such as hæmorrhage, embolism, violent pain, etc., the mortality is rather high, 13 deaths in 3,300 cases, and in a very large number of cases the result is temporary relief, not permanent cure.

Crushing often causes a good deal of œdema of the parts outside; if not done carefully, decided risk of hæmorrhage, which is difficult to find and control. Healing as a rule in two to three weeks.

Cautery.—Decided risk of hæmorrhage; after contraction often excessive, causing stricture. Healing often very tedious, two to four weeks or more.

Ligature.—Hæmorrhage rare if the piles are not tied in big masses. Healing depends on area of stump of pedicle left; usually takes two to three weeks; getting about too soon lengthens the time taken in healing. Contraction will again depend on care in operating, in forming small pedicles, and leaving uninjured mucous membrane between adjacent piles; suppuration leading to abscess or fistula is very rare. The mortality small; Allingham reports 1,600 cases without a death.

Whitehead's operation in his own hands has been very successful; he reports 300 cases without a death, but it is a much more severe proceeding than any of the above methods;

the hæmorrhage is greater during operation and greater risk of bleeding after. If primary union does not take place the gut retracts, and the resulting ulceration is very tedious. If all goes well, healing takes place in two to three weeks; ulceration may delay it for many weeks longer. So, on the whole, I think that carefully used ligature is the best all-round procedure, reserving Whitehead's operation for more severe cases, for which it is undoubtedly the ideal operation.

(Read before the Queensland Branch of the British Medical Association.)

THE CHOICE OF AN ANÆSTHETIC IN THE ADENOID OPERATION.

By Richard Arthur, M.A., M.D., Hon. Assistant Surgeon Ear and Throat Department, Sydney Hospital.

I SUPPOSE at the present time there are more operations done for the removal of adenoids than for any other condition. Thus at the Sydney Hospital in 1901 more than one-sixth of the total number of operations were for adenoids. Every general practitioner scrapes out the naso-pharynx, and finds it more profitable in the aggregate than the time-honoured procedures of circumcision and uterine curetting. Since this is so, it is a matter of some importance to determine the anæsthetic most expedient in these cases. I think it probable that in the past the majority of the cases operated on have been chloroformed. A dogma which until quite recently held unchallenged sway was that chloroform was the anæsthetic *par excellence* for children, being not only convenient but perfectly safe. But this tradition has been rather rudely shaken of late. Some anæsthetists of authority tell us that children often take chloroform very badly, that they become pale and collapsed, and that the administration of an overdose, especially when the child is struggling, is an easy matter. And, further, the use of chloroform in the adenoid operation has been singled out for special condemnation.

Anæsthetists, as a rule, are found to differ widely as to the relative merits and safety of the two great anæsthetics, and this mental attitude is conditioned to a certain degree by the influence of the school from which they have received their teaching. These schools I might broadly designate as the Scotch and the American. Now, I do not maintain that these rival schools are at one on this point of the dangers of chloroform in the adenoid operation, but still they are more agreed over it than over any other matter. I have looked over most of

the American books on the ear and throat, and find that none of them recommend chloroform. On the other hand, the English text-books are about equally divided, though, if anything, the weight of opinion is against chloroform.

Thus even McBride, of Edinburgh, who seems to take it for granted that there is only one possible anæsthetic, states that from his own experience, and from what he has read, the chief risk of the adenoid operation is chloroform syncope. This to my mind is an amusing instance of the way they have in Edinburgh of calmly ignoring anything about anæsthetics their own great Sir James did not know or teach.

The steps in the reasoning process are something like this:—

1. If you give chloroform, you introduce the chief danger of the operation.
2. But you must give chloroform.
3. Therefore you cannot escape the danger of chloroform.

I do not claim this as a syllogism, but merely as a legitimate way of putting Dr. McBride's statement. And surely Dr. McBride's reading should have led him to the knowledge that many anæsthetics have been recommended as preferable to chloroform in this operation. I need only mention ether, nitrous oxide alone or combined with ether, the chloride and bromide of ethyl.

The objection to chloroform is that it is dangerous. It is dangerous for two reasons:—

1. That the patient is often of the so-called lymphatic diathesis or status thymicus, characterised by enlargement of the tonsils, lymph follicles and glands, of the spleen and of the thymus gland. In this condition there seems to be peculiar risk in the administration of chloroform, due, it is thought, to the heart being prone to dilatation with resulting sudden syncope.

2. That the child with adenoids, especially if there is also hypertrophy of the tonsils, is already suffering from imperfect aëration of the blood, and in this state it is very easy to overstep the limits of safety, more particularly if there is any struggling.

It must be admitted that many deaths have been recorded during the operation for adenoids, and that in every case the anæsthetic has been chloroform. It is impossible to get statistics, for the reason that these cases are not reported except in the daily papers. I think one can safely challenge the supporters of chloroform to bring forward a single instance with a fatal result where another anæsthetic has been used. I will admit that Hewitt records one death, not in his own practice, under nitrous oxide, but this was in a very delicate child of seven with

long-standing pericarditis and pleurisy. On the other hand, he quotes Weir, of New York, as stating that no death from ether given for any condition has ever been recorded in patients under 12 years.

It is no argument for anyone to state that he has administered chloroform without untoward results in a large number of cases, and therefore it must be safe. This is a flagrant example of imperfect induction. One is not justified in drawing a conclusion as to the safety of chloroform from a limited number of instances, when both *a priori* considerations and the data of general experience are opposed to such a conclusion. The immunity from serious results may be ascribed to a fortunate choice of cases, to exceptional skill in administering the anæsthetic, or to the unknown element of luck; but from the mere calculation of probabilities the possibility of disaster is always imminent—a sword of Damocles hanging by one knows not how slender a thread.

It is impossible to estimate the proportion of deaths from this cause, but, however small it may be, there is no justification for it.

The operation for adenoids should be absolutely free from danger in this direction, and I would emphasise this again and again. I can conceive of no tragedy more appalling to all concerned, parents, relatives and medical men, than the death of a young healthy child from what was lightly spoken of as “merely a whiff of chloroform.”

I am prepared to admit that the advantages of the operation in many cases are undoubtedly so great that if it were necessary it might be worth while running a certain amount of risk. But is this necessary? Is chloroform the only anæsthetic at command? If it were, I should be inclined to say “remove the adenoids without an anæsthetic.” It means a shock certainly, but children do not die from a shock of that nature, and I do not believe it is worse than getting a firmly planted molar out, a procedure children have to submit to every day, and not nearly so painful as the incising of a whitlow or other inflamed swelling. But, as I have said before, there are anæsthetics which, judging from experience, can be pronounced perfectly safe. And first and foremost stands nitrous oxide. With this one can obtain an anæsthesia which will be perfect for about 20 or 30 seconds, followed by a period of about a minute of imperfect anæsthesia, in which, though there may be struggling and cries, there is little or no consciousness of pain or discomfort.

Now, this should afford plenty of time to clear out the naso-pharynx, and if necessary remove the tonsils. Of course the operator

who takes Walsham as his model will demur at this.

Walsham (who, by-the-by, states that chloroform appears to be attended with special danger in adenoid cases, and should be avoided if possible) in operating runs through the gamut of all the instruments devised—Lowenburg's forceps, Meyer's ring-knife, Gottstein's curette, and then the finger-nail, and therefore naturally demands ten minutes for all this scraping and changing.

If this harrying of the naso-pharynx is required, then nitrous oxide certainly will not do; but it is not required, and I am sure one can do more harm by taking away too much than too little. When one reads of the products of energetic curetting including fibrous tissue, cartilage, and periosteum, one is inclined to think that the leaving of small collections of adenoid tissue may be the lesser of two evils.

It has been urged against nitrous oxide that the apparatus required is cumbersome, and cannot be carried about. I think, however, this objection has been exaggerated, for the whole apparatus, including a hundred gallon cylinder of gas, can be packed into a hand-bag, and weighs only about ten pounds. To avoid disappointment, it is always well to weigh the cylinder beforehand so as to determine if it contains enough gas.

In passing, it may be said that the argument about the cumbersome and inconvenience either of gas or ether is beside the question. The anæsthetist's first duty is not to suit himself, but to see to the safety of his patient. The same objection as to inconvenience may be urged with equal force against the aseptic technique, which always involves trouble to the surgeon and occasionally to the patient. To my mind, perhaps the only disadvantage of gas is that the patient recovers so quickly and seems so little affected by the operation that the parents are apt to consider the whole procedure a very trivial one, and begrudge, accordingly, the fee that they would pay cheerfully if there was much sickness and general fussiness.

If, however, gas is not available, or the operator needs a longer anæsthesia, there is no reason why ether should not be chosen. I have given ether to children of one year and upward, preceding it sometimes by a few whiffs of a mixture of two parts of ether to one of chloroform on lint, and have found it quite satisfactory. It is objected that the face piece of the inhaler will frighten the child, but nervous children will be frightened by anything, even a piece of lint, and it is precisely in these cases where there is struggling and crying that the risk of an overdose of chloro-

form is appreciable. On the other hand, there seems to be no danger in pushing ether in these cases.

It is stated also as an objection to ether that it increases the hæmorrhage during the operation.

I am not prepared to admit that this is true; but even if it is, the loss of a slight extra amount of blood is of little importance.

I have not mentioned gas and ether, though I have used them, and found them an admirable combination.

I have no experience of the latest anæsthetic, chloride of ethyl. It has been recommended as giving an anæsthesia of three or four minutes with no unpleasant after-effects. It is too soon yet to say if it can be classed as a safe anæsthetic.

If I have omitted to quote a list of authorities in support of my position, it is not that they are not available. Here are two or three:—

Dudley Buxton says: deep anæsthesia from chloroform is most perilous in these cases. He uses himself gas and ether

Hewitt states that ether is certainly preferable to chloroform in these cases, and uses gas and ether, maintaining anæsthesia, if necessary, however, by pumping chloroform vapour into the mouth.

Lennox Browne, who has had an enormous experience, cannot too strongly deprecate chloroform. He relates what seems an almost incredible circumstance: the death of two children of one family from this cause during the adenoid operation.

But it is useless to multiply quotations. If I have said enough to cause some here to give serious attention to this subject, my paper will not have been in vain.

(Read before the New South Wales Branch, British Medical Association.)

CLINICAL AND PATHOLOGICAL NOTES.

REMOVAL OF A FOREIGN BODY FROM THE OESOPHAGUS.

A CHILD *æt.* five years had attempted to swallow a brooch, composed of white metal, with a diameter of one inch. The X-ray screen showed that the object was lodged in the oesophagus, somewhere between the sternal notch and the cardiac orifice, the presumption being that it was near the level of the left sterno-clavicular articulation. Owing to the age of the patient there were difficulties about obtaining a photograph.

When the oesophagus was opened, from an incision on the left side of the neck and at a lower level than the inferior thyroid artery, the brooch was discovered, with long forceps, to be about three inches below the opening. It lay transversely, with its flat surfaces antero-posteriorly. The blades of the forceps grasped it firmly, yet no reasonable traction would make it present at the wound. The cause appeared to me to be the inner lining of the tube forming folds in front of the foreign body when attempts were made to lift it. After several failures it occurred to me that when the object was grasped by the forceps a blunt director passed to the upper edge of it might push the mucous membrane beyond it, and allow it to advance. This was easily accomplished, and the brooch brought to the surface without difficulty.

*The loose connection between the mucous and muscular layers of the oesophagus effected by the submucous coat allows any foreign body, when drawn upon, to double up the lining membrane of the canal. Had the idea occurred to me earlier in the operation the brooch could have been removed in a few minutes and much valuable time would have been saved.

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**Vide* Quain's Anatomy, Vol. III., part IV., page 66.

A CASE OF SEPTICÆMIA.

I was sent for on 17th May to visit a patient, *æt.* 42, a carter. On examination I found his temperature 103°, pulse 80, with his right axillary gland swollen about the size of a pigeon's egg, extremely tender on pressure. The skin was acting well, the face congested and of a dusky hue. He complained of severe headache, giddiness, nausea, vomiting at first everything he would take. He also complained of pain and tenderness in the right axillary region. I examined the hand and arm for any cause that might give rise to swelling of the gland. I found a small abrasion on the back of the right hand, which he said was caused by knocking his hand against the wheel of his cart. There was a small scab on the wound, which did not show any inflammatory surrounding, and healed under treatment (carbolic lotion 1 in 20) in three days. No symptoms of lymphangitis from the primary point of infection, but apparently in this case the infective material was carried through the lymphatics without producing any reaction until it became arrested in the gland, causing the train of symptoms described. The temperature ranged

from 104·6° to 102° for three days, when it gradually became less. The axillary gland becoming more swollen, painful, and tender until on the tenth day, I made an incision into the tumour, and allowed a large quantity of pus to escape. My reason for recording the few notes on this case is the unusual symptoms following septic infection apparently through the wound in the back of the hand, the high temperature 104°, prostration, constant vomiting, giddiness, loss of appetite, sleeplessness. I may state that he was confined to his bed for 14 days.

During the progress of this case I considered it sufficiently suspicious to bring it under the notice of the health authorities, as the epidemic of bubonic plague was within measurable distance. On three or four occasions the patient was seen by the representatives of the Board of Public Health before plague could be positively excluded.

F. CUSCADEN, L.R.C.P., S. (Edin.)
Port Melbourne.

MIRROR OF HOSPITAL PRACTICE IN AUSTRALASIA.

PEAK DOWNS HOSPITAL, QUEENSLAND.

A CASE OF COMPOUND FRACTURE OF SKULL— SUBDURAL HÆMORRHAGE—TREPHINING. RECOVERY.

(Under the care of H. Zwar, M.B., Ch.B.,
Resident Surgeon.)

J.T., æt. 41, miner, was brought to the hospital at 10 p.m., April 1st. He was reported to me as dying. When I saw him he was in a comatose condition, deep stertorous breathing, with blood-stained foaming at mouth. Pulse slow and full. Pupils contracted and equal. Left eye closed with surrounding effusion of blood. An inch lacerated wound over upper anterior angle of right parietal.

History.—At one o'clock p.m. he was lowering timber down a shaft, when thinking it had reached the bottom he let go the handle of the windlass, which in turning round struck him on the head and knocked him down eight feet, the back of the head striking the edge of a trough. He regained consciousness by three o'clock, when he gave an account of the accident. A local chemist strapped the wound with sticking-plaster. He again lost consciousness and the effusion round the left eye appeared. He

was then put on a dray and brought in 10 miles. On the way he had 11 epileptiform convulsions.

I decided to operate, and had him taken to the operating-room. On the table he had another convulsion, and he was reported to me as dead while I was getting things ready. When I saw him he had stopped breathing. The pulse was slow and full. There was tumultuous epigastric pulsation. Respirations had ceased for at least a minute and a half when they again started with a deep gasp, followed by smaller gasps, and then the regular stertorous breathing. I quickly shaved and carbolicised the scalp (1 in 20), and turned up a flap. A fracture was running forward towards the left eye. I trephined at seat of skin injury. The dura mater was clear, and the brain pulsating—no indications of a clot. I then incised the dura mater, when a small amount of blood flowed away slowly. A gauze drain was put over the trephine-hole, and a few stitches into the scalp. His breathing soon improved. On taking him to bed he had another convulsive fit, but not as severe as the previous one. A quarter of a grain of morphia was given to quiet irritation. Next morning he was semi-conscious. The dressings were moderately soaked with blood and cerebro-spinal fluid. He gradually gained his senses. The gauze-drain was removed after 36 hours. A great quantity of cerebro-spinal fluid flowed away, gradually getting less till the fourteenth day, when it practically ceased. The temperature ranged at 99·6° at night for the first week and then became normal. For the first four weeks he complained of severe pains at the back of the head. These ultimately yielded apparently to potassium bromide. He left the hospital after six weeks from admittance, declaring he "never felt better."

I am reporting this case because I think this kind of case is too often left to its fate. I can recall two similar instances in which nothing was done. In one of these I was present at the time of death, which took place during a convulsive seizure; in this case the pulse continued to beat for eight minutes, by the watch, after respiration had ceased.

St. Vincent's Hospital, Sydney.—Last month Admiral Beaumont and Flag-Lieutenant Barlow paid an official visit to St. Vincent's Hospital. The Admiral evinced a great interest in going through the special ward set apart for invalids of the Royal Navy. Subsequently the visitors were shown the new operating building, with the attached sterilising and other departments. The Admiral, before leaving, expressed the great pleasure his visit to the hospital had given him, and congratulated the sisters and staff on the skill and care shown in the treatment of men and officers.

REVIEWS AND NOTICES OF BOOKS.

SAUNDERS' QUESTION COMPENDE—ESSENTIALS OF REFRACTION AND OF DISEASES OF THE EYE. By Edward Jackson, A.M., M.D., Emeritus Professor of Diseases of the Eye in the Philadelphia Polyclinic. Third edition. Revised and enlarged. 12mo., 261 pages, 82 illustrations. Philadelphia and London: W. B. Saunders and Co. Cloth, 4s 6d. Melbourne: J. Little.

The fact of a third edition of this book having in so short a period of time been found necessary is indisputable evidence of the popularity of this self-help to students and practitioners. It is perhaps to the former it most appeals. Unquestionably it is a most useful help in getting up a subject for the student to test the extent and accuracy of his knowledge by means of question and answer; and for this purpose the little book may be recommended. Many a student thinks he knows a subject, and perhaps he does in a hazy, uncertain sort of way, but often, until he has to give a clear answer to a direct question, he has no idea how foggy his knowledge is. An examiner knows this fact by painful experience. (Often the student finds it out by a more painful one.) At the same time such a book is only to be regarded as an aid, and is not to take the place in his study of the usual text-books, nor to be used till the latter have been fairly worked at. The ground covered is all that is likely to be required by the general practitioner. Most of the questions are answered in a concise yet clear manner, and further explained where necessary by means of illustrations. One point the author tries to make plain, and that is the importance of studying the subject practically and clinically. As he says, "No study of books ever made a physician or surgeon." To a student who keeps the above warning always before him the book may be safely commended; but as a mere help to cram for an examination it will prove a veritable pitfall, and its use for this purpose cannot be too strongly condemned.

F.A.P.

THE METHOD OF CUIGNET, OR RETINOSCOPY. By Edwin Harding Lenden, M.A., M.D. (Oxon.), with an Atlas of Diagrams pp. 130, 13 diagrams: crown 4to; 2 volumes. Price, 10s 6d. 1902: Baillière, Tindall and Co., London, Paris, and Madrid.

This monograph (his thesis for the degree of M.D. Oxon.), the writer tells us in his preface, is the "tiny contribution" to Ophthalmology of a man whom the *res angustie domi* prevented from following the study of eye disease, and, begun many years ago, has been written in the short intervals of a busy general practice. It is a fine example of sustained interest in a special part of a special branch of medicine, unfortunately but rarely met with in a general practitioner. The work is divided into three parts. Part I. is historical, and traces the development of the method from the time when Sir William Bowman in 1859-60 observed the shadow in conical cornea and noted the variations in the linear shadow in different meridians in regular astigmatism, but narrowly missed the importance and practical application of the method in testing and measuring ametropia. The credit of this is due to Cuiquet, who published his first paper on "Keratoscopie" in 1873, and to another Frenchman, Parent, who elaborated the method and properly explained the phenomena which had been misinterpreted by Cuiquet. It was not till 1881, when Parent visited Moorfields and demonstrated

the method that Retinoscopy came to be used in England. Part II. is theoretical, and gives a clear explanation of the phenomena and of the behaviour of the area of light and shadow, further elucidated by the coloured diagrams comprised in volume II. Part III. is practical, and describes minutely the procedure. The advisability of using a mydriatic is urged, homatropine with cocaine (the latter increasing the effect of the former) being the one preferred. The importance of estimating the refraction at the yellow spot is pointed out, the work of Barrett, Morton, and Lang on this point being referred to. The author prefers the concave mirror, while admitting the many advantages of the plane, and mentioning that such men as Swanzy and Story (and we might add many others) have been converted to its use, and that many of the younger ophthalmologists and most of the Americans prefer it. Both methods are described and cases cited of every possible variety of ametropia. Dr. Jackson's modification of the use of the plane mirror is described, and we note with a grain of satisfaction that he considers Jackson's description "complicated," for we have always thought it particularly involved. He concludes with a warm eulogy of Retinoscopy as the best objective test, but, we are pleased to note, says "the distance types are always the final test," and prescribes glasses according to the latter finding, not (after the way of some ophthalmic surgeons) doggedly insisting that retinoscopic finding *must* be correct, and forcing on an intelligent patient glasses that he (the surgeon) says must be suitable, not allowing the patient any voice or having any opinion as to the glasses that give him clearest vision and most comfort. On the whole the monograph is an excellent *résumé* of the subject, and it is seldom that we find a subject presenting so many debatable points put in a way in which we are so generally in accord. It is well worth a place in the library of anyone doing ophthalmic work. F.A.P.

THE AMERICAN YEAR-BOOK OF MEDICINE AND SURGERY, being a yearly digest of scientific progress and authoritative opinion in all branches of medicine and surgery, drawn from journals, monographs, and text-books of the leading American and foreign authors and investigators. Collected and arranged, with critical editorial comments by eminent specialists, under the general editorial control of George M. Gould. Surgery. Philadelphia and London: W. B. Saunders and Company (1901). Melbourne: James Little.

The experiment made last year in issuing this work in two volumes has proved acceptable to subscribers and is continued. The volume now under notice comprises Surgery, Obstetrics and Gynaecology, Ophthalmology, Otology, Diseases of the Nose and Throat, and Anatomy. It is a book of 600 pages, royal 4to., well printed on good paper, and contains a good index. The articles, which have been condensed by a specialist in each department, are almost world-wide in their origin, and may be said to comprise nearly everything of importance that has been written on the different subjects during 1901. Under Appendicitis will be found a copious abstract of an article on the "Parietal Incision" in operations on the appendix, by F. D. Bird, of Melbourne. The editorial comments are terse and to the point. The publication should prove of value to the busy practitioner who wishes to keep himself posted up in the doings of his contemporaries, and who cannot wade through the sometimes very long original articles for himself. W.H.C.

THE AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, 21ST JULY, 1902.

THE CONTAGIOUSNESS OF PHTHISIS.

IN a paper in the last issue of the *Intercolonial Medical Journal of Australasia* Dr. Duncan Turner, Consulting Physician to the Victorian Sanatorium for Consumption, asks the question—"Is Consumption Contagious?" and proceeds to discuss it in a somewhat unsatisfactory manner. But it is a timely question to raise in view of the extravagant statements made at the present day as to the contagiousness of pulmonary tuberculosis and the scare which has been created in the minds of the lay public. We must, of course, admit that pulmonary tuberculosis is due primarily to the tubercle bacillus, though some of the lesions met with in the bodies of patients dying from this disease may be due to a mixed infection. We know, further, that the tubercle bacilli are present in large numbers in the sputa of patients suffering from pulmonary tuberculosis, and that the organisms can maintain their existence for some indefinite time under favourable conditions of moisture and absence of sunlight. Under these circumstances we must admit that there is a great danger of persons becoming infected with the disease by sleeping in the same room or working in close contact with patients suffering from this disease. But while we argue that such infection is possible, it remains to be proved to what extent or under what circumstances infection of healthy persons takes place. It is true, as Dr. Turner states, that in many instances close contact with phthisical patients has not resulted in infection. He quotes instances from his own experience "where widows and single women belonging to families with a strong predisposition to phthisis, while eking out a scanty existence by

taking consumptive boarders, have remained quite free from the disease." He also mentions the fact that at Davos, where the consumptive population is one-half of the whole, the death rate from pulmonary consumption is almost lower than in any other district of Switzerland. At Falkenstein, near Frankfort, too, where a great outcry was raised against the establishment of a sanatorium, investigations have shown that the death rate from phthisis there has actually decreased since the sanatorium has been built. But here we think Dr. Turner has quite overlooked the fact that nowadays, as a result of the general education of the public on the dangers of infection from phthisical patients, extra precautions are taken; and if every care be taken to destroy the sputum at once, and to abstain from standing over the patients, so as to avoid the risk of getting any of the "spindrift" on the person, the danger of "catching consumption" is practically *nil*. But making every allowance for increased knowledge, there yet remains the well-known fact that at the Brompton Hospital for Consumption in London for many years before the doctrine of the germ origin of pulmonary phthisis was advocated, and when, therefore, no special precautions were taken to avoid infection, no case of direct infection occurred in any of the nursing or resident medical staffs. No doubt, however, the patients were under proper discipline, indiscriminate expectoration was not allowed, and every care was taken to destroy the sputa; so that unwittingly precautions were really taken to prevent the infection of the attendants on the patients.

These points are of material interest at the present juncture when the proposal to establish a hospital for chronic cases of pulmonary consumption near Hornsby, some 20 miles from Sydney, is meeting with such determined opposition on the part of the residents of the district. It is easy to understand the attitude of property-owners in the neighbourhood, who fear that their properties would deteriorate seriously in value if a consumption

hospital were placed there. But the opposition to the scheme, on the ground of its being a menace to the health of the inhabitants and a source of danger of infection by the tubercle bacilli, is based on an entire misconception of the modes of infection in pulmonary tuberculosis, so far as we are acquainted with them at present. To refer again to the Brompton Hospital for Consumption in London. This hospital is situate in a crowded neighbourhood of good-class houses and residences, and every week hundreds of phthisical patients travel by rail and bus to the hospital; yet statistics prove that the death rate from pulmonary tuberculosis in the district of Brompton is lower than in almost any other part of London. The same holds good in the case of the Victoria Park Hospital for Diseases of the Chest in the East End of London. These facts show that a consumption hospital conducted on proper lines is not in any wise a source of danger to the district, and the fears of the inhabitants of Hornsby and district on this score are groundless.

While, however, it would be manifestly wrong in the face of our present theoretical and practical knowledge of the pathology of pulmonary tuberculosis to deny the danger of contagion, it is equally wrong to promulgate false theories and statements, the only effect of which must be to hinder the progress of preventive measures, and to render the lot of the poor consumptive much harder than it need be.

THE MEDICAL PROFESSION AND THE AUSTRALIAN NATIVES' ASSOCIATION.

SOME recent tactics of the Australian Natives' Association in Victoria prove, what has already been urged in these columns, that this "patriotic" association is primarily a political organisation which secures for its officials and members special political and municipal privileges; and, secondarily, is in reality a medical sweating

institution under the guise of a friendly society. The latest proposal emanating from this high class patriotic society is to establish a medical institute, to be called the Carlton, Collingwood, and Fitzroy Medical Institute. The medical officers are to be precluded from private practice, and are to be paid at the munificent rate of £300 per annum for 500 members, and £6 per annum for every 10 additional members; the total number, however, on any one medical officer's list not to exceed 1,000.

This proposal has arisen in consequence of the recent action of some members of the Victorian Medical Defence Association in refusing to accept a reduction in their rate of remuneration for attendance on the members of a Foresters' Lodge in Carlton from 15s to 13s per annum. In the eyes of the A.N.A. this looked too much like organised resistance by the medical men, hence they felt that it was time to put on the screw and crush any attempt on the part of the profession to throw off the yoke. We hope that this incident will be an object lesson to the profession in Victoria, and that instead of calmly submitting to this proposal they will at once organise and take a determined stand in this matter. We hope that the profession in New South Wales will also take note of these tactics, and observe what they are likely to experience at the hands of the A.N.A. in this State if once they yield in the smallest degree to their arrogant assumptions and submit to become their slaves.

It is deplorable that over 70 medical men in the metropolis of Melbourne should be content to accept 12s 6d or even 13s for attendance on lodge members. Nothing less than 16s, which is the minimum recognised in New South Wales, should be accepted, and a determined effort should be made to secure it. This must be done sooner or later if the profession is not to be sold body and soul to the A.N.A. There never was a time when medical defence organisation was more necessary, and we trust that the Medical Defence Association of Victoria will adopt a bold policy, not only of defence,

but also of offence, and carry the battle directly against the strongholds of these politico-medical-sweating institutions. In this battle every individual practitioner in the State is interested more or less, and though one may think that it is a matter of indifference to him, he will yet find that the welfare of the whole profession is of vital interest to every member of it.

MEDICAL PRACTITIONERS' BILL.

A BILL to further amend the law relating to the registration of medical practitioners has been introduced in the N.S.W. Legislative Assembly. It provides that it shall be lawful for the Medical Board to place upon the separate register referred to in section 3 of the Medical Practitioners Acts Further Amendment Act of 1900 the name of any person who proves that he has studied at a recognised school of medicine, surgery, or obstetrics, although he had not completed the full course at any school; and (b) proves that he had practised in a reputable manner in New South Wales as a medical practitioner during 10 years prior to the passing of the bill; and (c) produces a certificate signed by two legally qualified medical practitioners of his ability and good repute in the practise of his profession. Such person when so registered shall have the rights of a legally qualified medical practitioner registered under the Medical Practitioners Act of 1898. It is hardly necessary to point out that under this bill, if it be passed in its present form,* anyone who has had no medical education whatever can have all the rights of a legally qualified practitioner. For if he has spent only one day inside a medical school, he can comply with the requirements of the first clause. We sincerely hope that this bill, which has obviously been introduced in the interests of some unqualified practitioners, will not become law, and that the State Legislature will decline in future to impair the utility of

the Medical Practitioners Acts Further Amendment Act of 1900. Any act which will facilitate the acquirement of a full status as a legally qualified practitioner by an imperfectly educated person must only result in jeopardising the maintenance of the health of the general public. As we urged in our last issue, the question of medical registration should be dealt with by the Federal Government, and we hope that a comprehensive Medical Bill will be introduced into the Federal Parliament at an early date.

THE MONTH.

British Medical Association Conversazione.

A very successful conversazione was given by the president and committee of the New South Wales Branch of the British Medical Association in the great hall of the University of Sydney on the evening of June 24th. Some 900 invitations were issued to members of the profession throughout the State, as well as to prominent officials and citizens. His Excellency Sir Harry Rawson, K.C.B., Lady Rawson, Miss Rawson and suite, His Excellency the Admiral and Lady Beaumont, Lady See, His Worship the Mayor of Sydney and Mrs. Hughes, the Chancellor of the University (Sir H. Normand MacLaurin, M.D.), and many others were present. Exhibits were shown by Drs. Ashburton Thompson and F. Tidswell from the Department of Public Health; by Mr. H. C. L. Anderson from the Public Library; by Mr. H. C. Russell, Government Astronomer; by Dr. F. H. Quaife, Dr. Hankins, Dr. G. L. O'Neill, Dr. Houston, Prof. J. T. Wilson, Dr. Sydney Jamieson, and others. Dr. C. A. Edwards gave an excellent exhibition of X-ray apparatus and vacuum tubes. The function was in every way most enjoyable.

The Governor's Levée.

At the levée held by His Excellency the New South Wales State Governor (Sir Harry Rawson, K.C.B.) on June 17th last, the New South Wales Branch of the British Medical Association was for the first time recognised as a public body. Some 50 members of the Branch attended and were presented to His Excellency by the President, Dr. G. E. Rennie. The Branch was also well represented at the farewell levée held by His Excellency the Governor-General on July 7th.

* The bill was thrown out on the second reading, on July 15th.

Proposed Maternity Hospital in Hobart.

It is proposed to establish a Maternity Hospital in Hobart as a memorial of the King's Coronation. At a meeting of members of the Medical section of the Royal Society the following lines were unanimously agreed upon as those upon which the profession would strongly support the proposed Maternity Hospital:— 1. That a Maternity Hospital is desirable—say, six to eight beds. 2. Patients unable to pay should be admitted free of charge; such patients to have a claim to one-third of the beds, and that an honorary medical staff should be appointed to attend such patients. 3. All paying patients must produce a recommendation from a medical practitioner before admission, and shall be allowed to engage their own medical attendant. These views were subsequently communicated to the finance committee of the King's Coronation Celebration Committee at a conference with members of the profession in Hobart, and a vote of thanks was accorded to the doctors for their valuable advice and promised co-operation.

Australasian Trained Nurses' Association.

The annual meeting of the Australasian Trained Nurses' Association was held in Sydney on July 11th. The President (Dr. F. Norton Manning) took the chair, and there was a large gathering of members of the Association. The report presented by the council gave a lengthy *résumé* of the large amount of work done during the year, and records steady progress. The total number of ordinary members on the register is now 513, and the midwifery branch now number 111 members. There are 62 medical members and 12 honorary members. The general funds of the Association are in a satisfactory condition, but the benevolent fund has not received the amount of support necessary to place it on a good foundation. It is gratifying to note that the question of the training of nurses has been carefully considered, and no nurse is registered who cannot produce certificates of having received systematic education and careful training.

Vaccination in New South Wales.

The report of the Chief Medical Officer to the Government on the number of vaccinations performed during 1901 shows that during the period named 2,081 vaccinations were performed, of which 2,028 were successful. Of the total number 66 were in Sydney and suburbs and 2,015 in country districts. Public vaccinations have been performed in only 16 districts, and in about 97 districts in which

there are Government vaccinators no vaccinations have been reported. It is therefore presumed that none have been performed. The number of births registered in the State during 1901 was 37,826, and the vaccinations thus give a percentage of 5.5. We have previously drawn attention to the very small percentage of vaccinated children in this State; and the fact of there being 97 districts in which no public vaccinations have been performed shows great laxity on the part of the profession in advocating what has been proved to be an important prophylactic against smallpox.

The Friendly Societies' Association of New South Wales and the A.N.A.

At a general meeting of the Friendly Societies' Association of New South Wales, held on June 27th last, the main business brought under consideration was the following motion, notice of which had been given by Bro. O. C. Pennington, G.M. of the National Independent Order of Oddfellows:—"That the Australian Natives' Association be requested to retire from the Friendly Societies' Association, as its aims and objects are inimical to the interests of this Association." This question formed the basis of a long discussion, but eventually it was decided in the affirmative by 20 votes to 11.

We are glad to notice that the Friendly Societies have taken the same view of the A.N.A. as that adopted by the New South Wales Branch of the British Medical Association, and have refused to be drawn by the A.N.A. into an attitude of hostility to the medical profession in New South Wales.

Honours to Medical Men.

Some members of the medical profession have been honoured by His Majesty the King on the occasion of his Coronation.

Sir Henry Normand MacLaurin, Kt., M.L.C., M.D., LL.D., the Chancellor of Sydney University, graduated M.D. at Edinburgh University in 1857, and in the same year was admitted L.R.C.S. and L.M.R.C.S. of Edinburgh. He is an LL.D. of Sydney University, and was nominated to the Legislative Council of New South Wales in 1889.

Sir John Logan Campbell, Kt., M.D., M.R.C.S., was born in 1817, and educated at Edinburgh. He has been associated with political and mercantile life in New Zealand, and has also published a book on early life in New Zealand.

Lieutenant-Colonel Robert Vandeleur Kelly, C.B., of Sydney, originally went to the front with the second detachment of the A.M.C. He

acted as regimental surgeon to the composite cavalry brigade, and assisted the 1st and 2nd Life Guards and the "Blues." He is the chairman of the New South Wales centre of St. John Ambulance Association, and also holds the position of Knight of Justice in the Order of St. John.

THE FIGHT AGAINST TUBERCULOSIS IN AUSTRALASIA.

VII.

Tasmania.

It is most probable that prior to the colonisation of Tasmania the island was free from the scourge of tuberculosis, and that this disease was an importation from Europe, as the early French *savants* who visited the island found no traces of phthisis or other tubercular disease amongst the aborigines. Be that as it may, soon after European settlement phthisis commenced its ravages amongst the natives, and finally acquiring almost an epidemic form helped to exterminate the aboriginal tribes.

In the long years which have elapsed since then tuberculosis has taken its annual toll of the white population, though never to the alarming extent of the old world's death-rate, thanks to our mild climate, our sparse population, our pure air, our outdoor life; and this despite the fact that we were continually importing tubercular subjects in all stages of their malady, who, in their search after health, doubtless often served as centres for the propagation of disease.

Taking the statistics of deaths from phthisis in Tasmania for the last 30 years, we find that in the first decade, 1871-80, the mean deaths per 10,000 people living was 10; in the decade 1881-90, 10·5; and in the 11 years 1891-1901, 7·5, showing an appreciable diminution. Since the year 1887, when the death-rate was almost at its highest, viz., 11·5 per 10,000 living, there has been a gradual diminution until, in 1901, the death-rate from phthisis has fallen to its lowest figure, viz., 5·7 per 10,000 people living.

If we consider the statistics of the last 11 years which show the figures of deaths from all forms of tubercular disease the decrease is still apparent, the death-rate being in 1893 at its highest, viz., 12·03 per 10,000 living, and gradually falling to 8·06 in 1901, figures which compare favourably with those of the other States.

As regards legislative and administrative action, there is no legislation in Tasmania directly dealing with tuberculosis; but the

Public Health Act of 1885, and its amendments of 1887, 1889, and 1896, and the establishment under these Acts of Local Boards of Health, have been indirectly of no little value. Unfortunately it is only in the larger towns of Hobart and Launceston that the powers conferred by these Acts have been made much use of. Under these Acts the inspection and registration of dairies, &c., is carried on; and any dairy or store supplying milk or butter within the district of a Local Board of Health, even if itself outside the radius of that Board is, nevertheless under its jurisdiction.

At the abattoirs of the two cities there is regular inspection of carcases, tubercular ones being destroyed in whole or in part, as the G.O.H. may direct. At the Launceston abattoirs about 2·5% of the carcases are found to show signs of tuberculosis. As for bovine tuberculosis no active steps have so far been taken to deal with this phase of the question, although the attention of the Government has been repeatedly drawn to it.

Both in Hobart and Launceston by-laws have been adopted prohibiting expectoration on pavements, &c., and it is to the credit of the Hobart local board and its G.O.H. that it was the first in Australia to pass such a by-law in 1896.

A great want in the public health system of Tasmania is the establishment of a public bacteriological laboratory in the north and south of the island for the examination of sputum. Not only is such necessary for suspected cases of tubercle, but also for diphtheria, typhoid, plague, &c.; and it is to be hoped that the public health authorities will ere long take steps to ensure the opening of such laboratories, the equipments for which already exist, although a somewhat "dog-in-the-manger" policy has hitherto prevented their proper utilisation. There is no notification of tubercular disease, and although such a measure would be of no little value should it ever become law, great care will have to be exercised to guard the social and pecuniary interests of the patient and his family, and much judgment will be demanded in its administration lest a "tubercular scare" be created and the unfortunate sufferers from this disease be stamped as social outcasts.

Were notification in force, the inspection and disinfection of the patient's habitat might be carried out, and much useful information imparted to himself and his friends; at present there is no system of advice by circulars and placards, and in some cases absolutely no care is taken as regards the destruction of sputum, proper ventilation, &c.; the medical attendant

is the only agent in educating the public in this respect, and his endeavours should be reinforced by the provision of such literature.

In 1901 Dr. Walch, of Hobart, was sent to represent the Tasmanian Government at the Tuberculosis Congress, on the work of which he has written an interim report. Dr. Walch is now preparing a detailed report, in which he is dealing at length with the Nordrach cure, with special reference to the establishment by the State of such a sanatorium.

At a general meeting of the Science Congress held in Hobart at the beginning of the year, a resolution was passed recommending in every State (1) the notification of phthisis; (2) the establishment of at least one sanatorium for tuberculosis in each State. This resolution was referred by the Central Board of Health to the Medical Society of Hobart, which body endorsed the resolution of the Science Congress.

A word as regards the climate of Tasmania in relation to the treatment of tubercular disease. Some cases of phthisis and other forms of tubercle do well in our higher altitudes in the lake district, while the mild dry climate of the East Coast is beneficial to some of the early cases, but great care will have to be taken in the examination of the climatic conditions of different localities before a site or sites are chosen for the establishment of sanatoria.

Tuberculosis.—Professor Behring, the inventor of diphtheria antitoxin, in a book he has recently published, gives some valuable information concerning the relation between the tubercle bacilli from men and those from animals. In co-operation with Dr. Ruppel and Dr. Roemer, he has succeeded in elaborating a practical preventive inoculating process against the tuberculosis of cattle. The experience gained in the laboratory is to be carried out on a large scale for agriculture. The book contains a brief review of all the researches in connection with tuberculosis made in Professor Behring's Marburg Institutes in the last six years. The introduction gives a summary of the results of experiments detailed in the first part with the help of numerous interesting protocols, tables, &c. Important information is given concerning the successful attempts to make young cattle immune from tuberculosis. Behring, by treating young cattle with living slightly virulent tubercle bacilli, has given them such power of resistance to tubercular injections that they are unharmed by very virulent tubercular bacilli, which certainly would prove fatal to cattle not thus treated. This success is of such great importance for agriculture that already immunising vaccination is being carried out on a large scale.

Dr. Frank Tidswell, micro-biologist to the Sydney Board of Health, delivered the first popular science lecture at the rooms of the Royal Society, on June 30th, on "Bacteria and Disease." Professor Warren, President of the Royal Society, presided over a large audience, and Dr. Tidswell received a hearty vote of thanks for his interesting address.

BRITISH MEDICAL ASSOCIATION NEWS.

PROCEEDINGS OF AUSTRALASIAN BRANCHES.

New South Wales.

THE regular monthly meeting of the Branch was held at the Royal Society's Room on Friday, 27th June, 1902, at 8.15; Dr. G. E. Rennie (president) in the chair. Present—Drs. Crago, Nolan, McDonagh, Scot Skirving, Hinder, Angel Money, Maitland, Newmarch, Palmer, J. Morton, Roth, Herschell Harris, Fiaschi, McPherson, Jones, Taylor Young, W. Chisholm, Ellen Wood, Harriett Biffin, Agnes Bennett, Kate Hogg, J. C. Windeyer, Maher, Pockley, Bennet, McMurray, Flynn, Brady, Wilkinson, McKay, Doak, Dixon, Murray Will, Gill, Kirkland, Sinclair Gillies, Chas. MacLaurin, Arthur, Gladden, Stratford Sheldon, W. E. Warren, Corlette, Sandes, Worrall, Ludlow, Binney, Sawkins, Martin, H. Marshall, Kenna, Megginson, Shand, Leahy (New Zealand), and others.

The minutes of the previous meeting were read and confirmed.

THE PRESIDENT announced the election of the following members:—Drs. S. S. Shirlow (Balmain), G. H. Smith Hozier (Lismore), F. W. Kane (Nowra), R. B. Stoney (Nowra), A. E. Barcroft (Bowral), F. S. Stuckey (Burwood), F. W. Langton (Redfern), C. J. Kearney (South Grafton), E. R. Roseby (Marrickville), J. L. B. Dixon (Bulli), S. Monti (New Italy, Richmond River), J. S. Milne (North Sydney), M. A. Schalit (Sydney), J. C. Windeyer (Sydney), Stratford Sheldon (Sydney), Johannes Carl Hein (Walla Walla), J. A. Caldwell (Maclean), W. J. Olivey (Millthorpe), W. H. Read (Sydney), E. W. Fairfax (Woollahra), C. Hardecastle (Hillgrove), W. R. Clay (Hornsby).

Members Nominated for Election.—Drs. E. W. Buckley (Wallsend), Harrie Cox (Warren), Harry Oswin Johnson (Parkes), A. S. Marr (Blayney).

DR. F. A. BENNET exhibited a strong and otherwise healthy man who for the past three months had suffered from a skin disease, covering the whole of his body with the exception of head and face. The eruption was more marked on the lower part of the body. It was scaly and tended to run in lines. He diagnosed the case as one of lichen planus.

DR. HANKINS exhibited a patient suffering from keloid in a scar behind the ear, the result of a mastoid operation.

DR. ANGEL MONEY said he had nothing to find fault with in the diagnosis of Dr. Bennet's case. He thought it was of neurotic origin.

DRS. RENNIE and CRAIG exhibited a boy. Dr. Rennie said they had produced this boy for the second time, he having been operated on two years previously for hydatid cyst of the brain. When the patient had been exhibited there two years ago, after operation, they had been challenged to produce him again that progress in the case might be noted. Fuller notes of the case would be read later. Briefly, about 12 months ago they had considered a second operation necessary, and they trephined, but on this occasion found no cyst wall but merely fluid from a cystic cavity. The patient now suffered from right hemi-anæsthesia.

DR. ARTHUR read a paper on "The Choice of an Anæsthetic in the Adenoid Operation" (see page 369).

Dr. SAWKINS said that unless the operation for radical cure was performed it was not necessary to get a complete anaesthesia. He certainly thought that chloroform properly administered was as safe as any other anaesthetic.

Dr. PALMER said he rose to uphold the teaching of the Edinburgh school, which Dr. Arthur had assailed. He thought chloroform the proper anaesthetic to use; but for 12 months during his stay at Edinburgh, in one ward, nothing but ether had been used, so that Dr. Arthur's statement that ether was never used at Edinburgh was not correct. He did not believe in giving too much chloroform; in its administration it was not necessary to abolish all reflexes, and of course care must be exercised in the giving of this as in all other anaesthetics. He did not think the Scotch school had very many accidents through the administration of chloroform. He certainly during his ten years had never seen any fatal case.

Dr. CHARLES MACLAURIN said he was from Edinburgh and was sure that the students had open minds. He considered there was only one safe anaesthetic for adenoid operation, and that was ether. Statistics showed that death from chloroform occurred once in 1,500 cases, though, of course, there were some men who had thousands of cases without a death; still it must be remembered that the one death in 1,500 should not occur. Medical practitioners have really no right to subject anyone to any unnecessary risk. In one case he had administered chloroform and the patient died; he was satisfied now that if ether had been used the patient would have been alive to-day; and when he operated now he always asked the anaesthetist to give ether.

Dr. STEWART MCKAY said that in the course of his general practice he had had occasion to operate on over 400 cases of tonsils and adenoids. He always used chloroform, and in almost all the cases he had administered it himself. He did not believe that in many of the cases that died that the fatal result was due to the chloroform; he thought that many of the cases were smothered, and this was due to the blood being drawn into the windpipe.

Dr. HINDER said he thought the point at issue had been lost sight of, namely, that the anaesthetic should be given by an experienced hand. If chloroform was given by an anaesthetist it was no doubt safe, but as a general anaesthetic he thought ether was safer.

Dr. BRADY said he had a good deal of experience in the use of chloroform in his operations. At the Sydney Hospital a mixture of gas and ether had been used sometimes. He did not think gas should be given to young children. He did not think death from chloroform was due to syncope, but he thought the patient was smothered, and death was largely due to inattention on the part of the anaesthetist. One point he would emphasise, and that was that the anaesthetic should be given in silence; it was not the time to discuss a golf score, but one's whole attention should be given to the matter in hand. He thought that when the operation was performed by a skilful operator, and the anaesthetic administered by a skilful anaesthetist, there was no danger from the use of chloroform. He certainly thought when a patient stopped breathing the operation should not be gone on with until the patient had been resuscitated. He thought that where you have large tonsils and adenoids it was good practice to remove one of the tonsils before beginning the administration of the anaesthetic.

Dr. MACDONALD GILL said the operation needed a good deal of skill, and, of course, if the removal could be done in one clean sweep well and good, but if this was not done, he thought the time given with gas was not sufficient to get the operation properly finished. With regard to the choice of an anaesthetic, he had only

given ether once to a young child, and had also given gas and ether. In giving gas it must be remembered that the duration of the anaesthesia was about 30 seconds and with gas and ether about 50 seconds. Gas could not be given a second time, and this, of course, was one of the great disadvantages; the time was too short in some cases to complete the operation. If you have a patient struggling all the time, you found it very difficult to get the work properly done. He thought chloroform the best for the adenoid operation, but he also thought there was rather too much indiscriminate operating for adenoids.

Dr. SINCLAIR GILLIES said with regard to the use of gas the whole question was, Did it give sufficient time to do the operation properly? The operation for adenoids, to be successful, must be thorough. If it were not so it would be useless. At the Children's Hospital 2 per cent. of cases operated upon for adenoids suffered from recurrence. He would not recommend gas for very young children, but if children were carefully approached they took ether very well. Still, beyond question, chloroform was more convenient to give. The deaths that had occurred where chloroform had been administered were due to overdose of the drug and not to suffocation.

Dr. SCOT-SKIRVING called to mind discussions that had taken place in that room fifteen or sixteen years before relating to the use of chloroform or ether. Every now and then there had been great discussion over the matter, but it resulted in letting well alone, and each choosing for himself. It would, he considered, be extremely unwise for them as an Association to make any definite pronouncement on the choice of an anaesthetic.

Dr. WILKINSON thought it was necessary to give chloroform up to the age of 10 or 12, but it was not always necessary to give an anaesthetic after that age. Dr. Brady had said he would remove one tonsil, but he would go farther, and say it was better to remove both tonsils. General practitioners were too prone to undertake operations for the removal of adenoids, when it was admitted that a great deal of skill was required to do it properly. He would again say that patients above the age of 12 did not as a general rule require an anaesthetic; indeed, if they were questioned, they admitted that there was very little pain. At the Sydney Hospital chloroform was largely used with good results.

Dr. ARTHUR, in reply, said the position he had taken up had not been assailed by the discussion which had taken place. Everyone knew there was a chance of death from the use of chloroform. Then why run the risk? He was also a student at Edinburgh, but had certainly never heard of ether being used in this operation. It was said that deaths from chloroform were accidents; but these accidents could be obviated. And why do not accidents occur from other anaesthetics? Chloroform was dangerous, and one death from it vitiated the idea that it was the best anaesthetic for adenoid operations.

Dr. KIRKLAND read a paper on "Atrophic Rhinitis."

Dr. BRADY said he agreed with Dr. Kirkland that in certain cases the condition was due to sinus suppuration, but there were a certain number of cases of the kind that he did not think could be explained in that way. No doubt, in some cases, a cure would be effected by washing them out, but he advised operation.

Dr. HINDER exhibited a uterus removed for a ruptured pregnancy, occurring in stump left after removal of a former ruptured tubal pregnancy.

Dr. NOLAN exhibited dissection of temporal bone.

The PRESIDENT announced that the Governor-General would hold a *levée* on July 7th, and hoped that members would attend.

The PRESIDENT announced that the Hon. Dr. MacLaurin had been knighted by His Majesty, and a vote of congratulation was carried by acclamation.

Dr. Worrall gave notice that at the next meeting of the Branch he would move the following addition to the Articles of Association:—"No member of the New South Wales Branch of the British Medical Association engaged in private practice shall allow himself to be interviewed upon medical subjects by representatives of the lay press without a written undertaking that his identity shall not be disclosed."

COUNCIL MEETINGS.

THE Council met at the Association Rooms on Friday, 13th June, 1902, at 8.30 o'clock. Present—Drs. Rennie, Crago, Fiaschi, Brady, Newmarch, Worrall, Pockley, Hankins and Dick.

The minutes of the previous meeting were read and confirmed.

A letter was read from the Western Suburbs Medical Association asking for an expression of opinion as to fees for examination in the Canadian Foresters and the Industrial Life Association. Resolved—That the Council is of opinion that the minimum fee for all examinations of this character should be £1 1s each.

Application for a conference by the Balmain United Dispensary was dealt with.

The conference was held on Friday, 16th May, 1902, and the Hon. SECRETARY read the notes of the conference, and the report which was to be submitted to the Board of Directors of the Dispensary.

A copy of the letter sent by the Hon. Secretary to Dr. Furnival, of Auburn, with reference to the second medical officer of the Druids' and Oddfellows' lodges; also Dr. Furnival's reply, saying he had decided to give notice that he would not continue in conjunction with any officer of the A.N.A.

Letter from Dr. Rooke, of Burnie, Tasmania, with reference to the agreement with the A.N.A.

On the question of travelling allowances to medical witnesses, thirteen letters had been received. Resolved—That letters be forwarded to the Government Medical Adviser with a letter expressing a hope that he may see his way to advise the Government to make the remuneration to medical witnesses at coroners' inquests uniform with the present police regulations relating to travelling expenses.

Letter from Mr. Hingston was read.

The PRESIDENT reported that His Excellency had placed the Association on the list of Public Bodies for Leves, &c. Resolved—That letters of thanks be forwarded to Mr. John See and Mr. Critchett Walker for their assistance in the matter.

Arrangements for the conversazione were discussed.

The Hon. TREASURER reported a credit balance of £285 12s 6d for the general account, and £75 12s 8d for *Gazette* account.

The Council met at the Association Rooms on Friday, July 4, 1902. Present—Drs. Rennie, Crago, Hankins, Newmarch, Hinder, Pockley, Worrall, MacCormick and Dick.

The minutes of the previous meeting were read and confirmed.

The following new members were elected:—Drs. Harrie Cox (Warren), Harrie Oswin Johnson (Parkes), A. S. Marr (Blayney).

Read—Letter from Dr. Furnival, Auburn, suggesting formation of defence fund for protection of those members who might suffer financially through resigning lodge appointments at the instigation of the Branch. Dr. Furnival to be asked to formulate scheme.

Read—Letter from Dr. Reuter Roth *re* alleged gratuitous teaching at Technical College by lecturers of the Civil Ambulance Brigade.

Read—Letter from Dr. Sydney Littlejohn, brigade chief medical adviser, stating that no application such as that referred to by Dr. Roth had been made to the brigade authorities.

The Hon. SECRETARY reported interview with the Grand Secretary M.U.I.O.O.F. *re* the deadlock between the Inverell lodge and local medical men, at which the Secretary suggested that the matter be referred to arbitration. Resolved—That the Hon. Secretary write to the medical men of Inverell advising that the suggestion be acted upon.

Also, to the Secretaries of the Oddfellows' and Druids' Lodges of Auburn, pointing out that if they persisted in employing a medical officer ineligible for membership of the B.M.A., they rendered themselves liable to be placed on the list of societies inimical to the interests of the medical profession, and would therefore get no applications from members of this Association.

Resolved—That the police authorities be written to reporting that an optician in Sydney was styling himself doctor of ophthalmology, in contravention of a recent Act of Parliament.

The Hon. TREASURER reported a credit balance of £258 7s. 7d. for the general account, and £39 7s. 6d. for the *Gazette* account.

Resolved—That the discount allowed to branches taking the *Gazette* be subjected to revision in order to meet the increased expenditure on the paper.

Victoria.

THE ordinary monthly meeting was held in Pleasance's Buildings, Collins-street, Melbourne, on June 25th.

The President (Dr. McCansh) in the chair, and the following members were present:—Drs. Willis, Gerald Weigall, Neild, Henry, Cuscaden, Fox, Vance, and Bryant.

The minutes of the previous meeting were taken as read.

Dr. GERALD WEIGALL read a paper on "A Case of Naumatic Epilepsy."

Dr. NEILD thanked Dr. Weigall for his instructive and carefully prepared paper. In some post-mortem examinations at the lunatic asylums he had found portions of bone pressing upon the brain, and no doubt furnishing an origin for disease of the brain. He remembered a tall man, who had been a guide at the Jenolan Caves, who bruised his head by rising too quickly in one of the low caves. Nothing was thought of this injury at the time, but some weeks after he began to show symptoms of mental disturbance, and then became maniacal. He was sent to an asylum, but never recovered his reason and eventually died. Dr. Neild found post-mortem that this man had fractured his right parietal bone, and that an exostosis $\frac{1}{2}$ -inch deep was pressing on the right hemisphere; and no doubt if an early operation had been performed on this man all his subsequent trouble might have been avoided. He also recalled the case of a young fellow who, whilst slightly intoxicated in an hotel in the city, got a slight push, and fell down on a tiled floor, striking his head. He was picked up all right and went home. The following morning he went to his work, and did not complain of anything, and said he had no pain nor any other inconvenience. About three weeks after this he fell down suddenly and was found to be dead. At this post-mortem there was fracture of the base of the skull and a large clot of blood over the basilar process. There had evidently been very slow hemorrhage going on for three weeks, and not causing any symptoms until the end. He concluded by saying that in head injuries you cannot always judge of the gravity of the case by the symptoms present.

Dr. BRYANT recalled to his memory the case of a man hurt at Swan Island by a large beam falling upon his skull. The patient was under the care of a colleague who watched the case closely for a fortnight, and during this time the reflexes were quite natural, and there were no symptoms of pressure. The patient could converse on any subject, and neither complained of pain nor ache, but a distinct lineal fracture, extending from the right parietal bone into the right temporal bone, could be made out. The pulse gradually became slower, and for this reason the medical man in attendance became anxious. A consultation was held about nine o'clock one night, and it was agreed to trephine over the centre part of the fracture in the morning. During the early morning the patient had an epileptic fit, but recovered quickly, and the doctors were not sent for. At nine o'clock the next morning the patient appeared to be in much the same condition as he had been overnight. His knee reflexes were perfect, and the only change notable was that the pulse was slightly slower, and he complained of numbness of the fingers of the left hand. Whilst the instruments were being got ready for operation the patient suddenly went off into a violent epileptic convulsion, and died before the trephined bone could be removed. It was found after that the fracture had gone through the middle meningeal artery groove, and this vessel must have been oozing quietly for nearly three weeks. The pressure on the right hemisphere had been so gradual that it had set up very little disturbance until the end. The brain was pushed away from the skull on the right side by clots for nearly an inch in depth. This case shows how nature will accommodate itself to altered conditions, and that the gravity of a head injury cannot always be gauged by the symptoms.

Dr. CUSCADEN congratulated Dr. J. Weigall on the report of an interesting case, and it reminded him of a similar one. A coal lumper working at one of the piers was struck on the head by a large lump of coal which fell upon him from some height. The man had a scalp wound, which was attended to by Dr. Cuscaden, but he had no symptoms of pressure. About six months after he was called to attend the same man, this time suffering from epileptic fits, which kept recurring at shorter and shorter intervals. Finally the man lost his memory and all knowledge of his identity. He was sent to the Alfred Hospital and was trephined over the site of the old scar and got better for a time, but eventually he became insane, and died in the Kew Asylum.

Dr. WEIGALL found that on looking up the literature of the results of trephining that they were more unsatisfactory than he was led to suppose. The reason for this no doubt was that so much mischief done to the cortical layer that many cells are permanently damaged. Therefore it was wise to wait three years before publishing cases of supposed cure. Again, in this particular case which he had reported, he could not understand why the patient should develop symptoms 22 years after the injury; it appeared to him that the symptoms ought to have come on before, or not at all. A specimen of the portions of bone removed by trephine was handed round for inspection and caused a good deal of surprise, as two bony exostosis projected for about an inch from the inner surface of the bone, and must have been a great source of irritation to the brain.

Dr. McCANSIE then read clinical notes in a case of "Phosphorus Poisoning."

Dr. NEILD could not find the notes of this case, as he had mislaid them with some six other cases, which he hoped to embody into the form of a paper for the consideration of the members on some future occasion. He found the symptoms in all these cases were the same, except that children's symptoms came on more rapidly and a fatal termination more quickly occurred.

Dr. WILLIS asked if any antidote had been used in this case?

Dr. McCANSIE replied that it was not known that the patient had taken phosphorus until some days after she had taken it, so that the symptoms had fully developed and were beyond the use of antidotes when this was found out.

Dr. CUSCADEN read notes of a case in which "An Unusual Train of Symptoms followed Septic Infection." (See page 371.)

Dr. HENRY inquired if both axillary glands were affected.

Dr. CUSCADEN replied that only the right axilla was affected.

Dr. FOX showed a small accumulation lit up by five small cells, and accompanied by an instrument called Dr. Isaac's search-light. This gave a very powerful light, and possessed the usual advantages of the electric light, viz., no heat, brilliant light, and no danger of setting fire to anything. This instrument could easily be carried in the overcoat pocket, and contained enough electricity to keep the lamp alight for one and a half hours.

Some experiments were made with the light, and it was found, by pressing the light on the outside of cheek, it illuminated the inside of the mouth; and by putting it inside the mouth, and shutting up the mouth with the hand, light could be noticed showing thus the cheeks and the edges of the orbits.

According to Dr. FOX, this proved that opacity was only a question of degree.

This accumulator was easily charged from a large accumulator, and it was an exceedingly handy instrument for the examination of the nose, ear, mouth, vagina, and rectum, and would be very useful to the general practitioner for this outside work.

Queensland.

At the meeting of the Branch held in June, a paper was read by Dr. Hawkes on "Some Methods and Results in Minor Surgery." (See page 364.)

Dr. THOMSON spoke of the high value of so practical and useful a paper. He agreed with the teaching of Syme, as proved by post-mortem experience, that the injection of iodine into the sac of a hydrocele, did not produce adhesions. He had not found the eversion-of-the-sac method so successful as others. He regarded the complete emptying of the sac, and the use of the 1-14 Edinburgh tincture, as the two most important points in the injection method. He emphasised the importance of the use of the two thumbs in dilatation of the sphincter in the operation for hæmorrhoids.

Dr. BYRNE agreed with Dr. Hawkes as to the value of ligaturing as small a pedicle as possible in hæmorrhoids, the after-pain of such operations being almost entirely due to the inclusion of too much tissue in the ligature. He favoured the injection treatment of hydrocele, using a fluid consisting of half tincture and half liniment of iodine.

Dr. TURNER asked if in the use of carbolic acid as an injection for hydrocele there was any danger of poisoning?

The CHAIRMAN had had a fair measure of success in the injection method of treatment of hydrocele. He mentioned one case in which cure had resulted in a very old case from insertion of a solid stick of nitrate of silver, a plan adopted by Maisonneuve. Lately he had used with success iodised phenol. He spoke favourably of Whitehead's operation for the cure of hæmorrhoids, the results being very good if the operation were done carefully.

Dr. HAWKES, in reply, said that the injection treatment of hydrocele occasionally resulted in bad failures, severe pain and sloughing, and that any large series of cases showed a certain proportion of such failures. He

replied to Dr. Turner that there had been cases of non-fatal carbolic acid poisoning after injection of the hydrocele sac. He liked Whitehead's operation for hæmorrhoids, the objection to it being that it took a long time to perform.

A MEETING was held on Friday, July 4th, Dr. Robertson in the chair. Dr. Lockhart Gibson exhibited the case referred to in his paper, also a lens with foreign body in situ, and related the following history of the case:—

B.K., aged 15 years, was referred to me by Dr. MacDonnell, of Toowoomba, on June 7, 1902, on account of a traumatic cataract. She gave the following history:—In October of last year she was struck in the left eye by a stone. The eye was slightly painful for three or four days, then ceased to trouble her. Its sight remained a little less clear than before the accident, but was good. The eye became suddenly blind on Good Friday of this year, and an alteration in the pupil was then noticed. No cataract, therefore, appeared until five months after the accident.

Examination.—Lens completely cataractous, eye apparently otherwise healthy. Oblique illumination with undilated pupil, and, without the aid of an X-glass, revealed no foreign body in the lens and no wound of the cornea. Dilatation of the pupil at once revealed a small foreign body in the inferior outer quadrant of the lens. Very careful re-examination of the cornea then disclosed a minute scar which might have been that of a penetrating wound. It was situated a little below the centre of the cornea and at a considerably higher level than the foreign body in the lens. The opaque white lens formed an unfavourable background for observing a small wound in the cornea. The youth of the patient and the position of the foreign body in the lower part of the lens and not much below its anterior surface made the possibility of removing the lens minus its foreign body very considerable. I considered carefully whether Pagenstecher's operation for removing the lens in its capsule might not be the best to adopt, but decided to perform the ordinary operation, as for senile cataract, with iridectomy. The youth of the patient made chloroform necessary. I made as large an incision as for a senile cataract. Did a small iridectomy. Tore the anterior capsule of the lens very gently, and extracted the lens whole with its foreign body. It came out at the large incision very readily, though holding together on account of its gelatinous consistency, and not on account of any hardness. It was little, if at all, harder than healthy lens.

The eye has done well, and has already good vision, viz., $\frac{1}{2}$. N. will, I believe, see $\frac{1}{3}$. But she retched pretty violently for 12 hours after the chloroform, and a little iris prolapsed into each angle of the wound. This led to delay in healing, and a cystoid cicatrix which required attention under cocaine. The wound now healed, and tension is normal; but it is possible that a cystoid cicatrix which persists at one corner may still require interference. If so I would adopt G. A. Berry's plan of dissecting up the conjunctiva, touching the small leak with a fine cautery point, and then replacing the conjunctiva. The corneal scar, though small, is now plainly visible, and oblique illumination, on account of the black background of the pupil. The lens has been hardened in 5% formalin, and shows the foreign body in position.

Dr. LOCKHART GIBSON read (1) a paper on "The Complete Mastoid Operation with Thiersch Grafting—Balance" (see page 357); (2) "Two Cases of Double Glaucoma, with Remarks on Etiology."

The papers were of great interest, and the chairman and other members present at the meeting offered congratulations to Dr. Lockhart Gibson upon the clear and graphic manner in which the subjects were treated by him.

Drs. EGAN, HOLT, and CUPPAIDGE were nominated for membership of the Branch.

The business of the August meeting will be a paper on "Septic Meningitis," illustrated by microscopic specimens by the Hon. W. F. Taylor.

[The report of the annual meeting of the South Australia Branch has been received too late for publication this month.]

CORRESPONDENCE.

London.

(FROM OUR OWN CORRESPONDENT.)

The Chancellorship of the University of London—The Army Medical Service—Professional Longevity—Cancer Mortality in England and Wales—Medical Endowment in America—Fourteenth International Medical Congress—The Winding-sheet of Christ—The Latest Use for d'Arsonvalisation—The Practice of Quackery.

THE Earl of Kimberley, who has just died, was for more than 40 years a member of the Senate of the University of London, and in 1899 became Chancellor in succession to the late Lord Herschell. By the new constitution of the University the vacant chancellorship will, for the first time, be filled by convocation voting as at a senatorial election. The date of election has been fixed for the 13th May, and nominations may be lodged with the Clerk of Convocation up to the 22nd of April. Several names are already mentioned; among others, Lord Rosebery, Lord Avebury, and Lord Lister. A contested election would probably be provocative of considerable excitement among the graduates who constitute the constituency.

A Royal Warrant, dated March 24th, has been promulgated to the army, with the approval of the Secretary of State for War, amending the regulations relating to the appointment, promotion, pay, and non-effective pay of officers of the medical services. The Surgeon-General holding the appointment of Director-General is to rank as Lieutenant-General, and other Surgeon-Generals as Major-Generals. Six of the most meritorious officers of the Service shall be named honorary physicians and six honorary surgeons to the King, and on such promotion an officer under the rank of colonel in the Royal Army Medical Corps may be promoted to the brevet rank of colonel.

The following shall be the yearly rates of pay, additional pay, and charge pay at headquarters:—Director-General, £2,000; Deputy Director-General, £1,500; Assistant Director-General, £850; Deputy Assistant Director-General, £750. At other stations the daily remuneration shall be as follows:—Surgeon-General, £3; Colonel, £2; Lieutenant-Colonel, £1 10s; Lieutenant-Colonel, specially selected for increased pay, after at least eight years' service abroad, £1 15s; Major, £1 3s 6d; Major, after three years' service as such, £1 6s; Captain, 15s 6d; Captain, after seven years' total full pay service, 17s 6d; Captain, after ten years' total full pay service, £1 1s; Lieutenant on promotion and Lieutenant, 14s; Adjutant of the Royal Army Medical Corps (Volunteers), the pay of his rank; Quartermaster, as a quartermaster of infantry.

A Lieutenant-Colonel appointed honorary physician or surgeon to the King will receive the pay of a Colonel, and a Captain holding the brevet rank of Major shall have 2s a day in addition to his pay as a Captain. On completion of three years' service an officer of the Royal Army Medical Corps may be permitted to become an Army Reserve officer for seven years, and while so serving will receive £25 a year.

The conditions and scales of payment and gratuity on retirement are revised, and provision is made for additional charge, extra duty, and sick pay.

The new Warrant is a good one as far as it goes; but it is not without flaws, and its success is largely dependent upon the spirit in which it is administered by the War Office.

It has been pointed out by the *Star* that the pages of *Burke* contain the names of two members of our profession, each of whom is in his ninety-fourth year—Sir Charles Nicholson, M.D., who held a distinguished position in the Legislature of New South Wales and was created a baronet in 1859; and Sir Henry Pitman, M.D., who was for many years registrar of the Royal College of Physicians of London and was made a knight in 1883.

Apropos of this statement, a still more striking instance of longevity is communicated to the *Lancet* by Mr. Christopher Heath, who writes to say that Mr. Nathaniel Davidson, L.R.C.S. Edin., L.R.C.P., London, to whom he was apprenticed in 1859, has attained the patriarchal age of 97 years, and is still in the possession of good health.

At a meeting of the Chelsea Clinical Society, held in March, Dr. John F. W. Tatham, Superintendent of Statistics at the General Register Office, communicated some interesting figures relating to the prevalence of malignant disease. He pointed out that during the last four years the annual death rate from this form of disease had exceeded 25,000, and that the mortality had been greater among women than men; the female death rate in each 1,000,000 living amounting to 975, and the male death rate to 672. This excess is apparently due to the special susceptibility of the female generative organs to diseases of this type, because when the deaths from cancerous affections of the ovaries, uterus, and breast are subtracted from the total of cancer deaths among females, the remaining death rate among women is considerably less than among men. Thus in the four years 1897-1900 the male deaths from cancer, less the deaths from disease of the generative organs, correspond to an annual mortality of 645 per 1,000,000, whilst the female rate, with the same limitations, did not exceed 568 per 1,000,000. The general mortality is not excessive till after the twenty-fifth year, but as age advances it increases rapidly in both sexes, as is shown by the following table:—

CANCER MORTALITY AT CERTAIN AGES, 1900.

		Annual death rate per 1,000,000 living at each age.	
		Male.	Female.
All ages		672	975
Under 35 years ..		44	66
35-45 years		418	942
45-55 „		1,483	2,433
55-65 „		3,796	4,561
65-75 „		5,735	6,250
Above 75 years ..		6,715	7,468

Within recent years the notorious increase of cancer among both sexes is borne witness to by the following figures:—

ANNUAL RATE OF MORTALITY IN ENGLAND AND WALES, RATE PER 1,000,000 LIVING:—

1891-70.		1891-1900.		Increase per cent. in 1891-1900.	
Males.	Females.	Males.	Females.		
242	597	519	903	147	74

From these statistics it is evident that, during the last thirty years, malignant disease has increased among men much more rapidly than among women, although at the present time women are, from the unequal susceptibility of their generative organs, the greater sufferers.

The University of Harvard is at present conspicuously in luck's way as regards generous benefactions for medical research and equipment. A few months ago Mr. J. Pierpont Morgan gave a large sum of money to assist the completion of the new medical school buildings, and it is now announced that Mr. Rockefeller, in commendable imitation of such a worthy example, has offered a donation of no less than £200,000 towards the same object. Mr. Rockefeller's gift is made subject to the stipulation that an additional sum of £100,000 shall be raised by other contributors, either for buildings or endowment, and it is understood that already between £38,000 and £40,000 has been promised.

The fourteenth International Congress of Medicine will be held in Madrid, under the patronage of the King and Queen-Regent of Spain, from April 23 to 30, 1903.

Representatives have already been invited from the Governments of all other countries, as well as from the universities, schools of medicine, and principal medical and surgical societies. The work will be distributed over sixteen sections, under the direction of Dr. Angel Fernandez-Caro as general secretary. The president will be Dr. Julian Calleja. Intending members of Congress are requested to specify in their applications the section which they wish to join. The fee for membership is 30 pesetas (equal to about one pound sterling), and carries with it the right to receive a copy of the transactions of the section which the applicant elects to belong to. The official languages will be Spanish, English, French and German.

At the last meeting of the Academy of Sciences in Paris a paper of unusual interest was read by Dr. Vignon on the winding-sheet preserved at Turin, and traditionally said to be that of Christ. He exhibited a series of photographs (which were taken in May, 1898, during an exhibition of sacred art at Turin) of certain brown markings on the sheet, which, like a true negative, gave white imprints when photographed. It has already been clearly demonstrated that almost all substances are capable in the dark of acting on a photographic plate and producing a picture, the phenomenon being apparently always established in the presence of an oxidising agent, which Russell and others conclude to be peroxide of hydrogen. By careful experiments Dr. Vignon proved that cloth impregnated with oil and aloes, as was the winding-sheet in question, will take on an impression when in contact with ammoniacal vapours such as would be given off from a sweat rich in urea, as sweat always is in a person dying a slow and painful death. The cloth thus became analogous to a highly sensitised film, and it would seem not to be beyond the bounds of probability that, apart from any influence of light, the chemical process of oxidation of the fixed oils with a consequent colour change of certain constituents of the aloes might cause an emanation of vapours capable of reproducing on the cloth a more or less complete image of the dead Christ. The photographs are thus described:—“The impression of the head is excellent. The wounds produced by the crown of thorns and the marks of the blood drops are quite obvious. The wound in the side, and even the marks of the stripes produced on the back by the flagellation, are also quite evident. Each of these stripes has at its end an enlargement such as would be produced by a cord with a ball of lead at the end. It is well-known that this form of scourge was employed by the Roman soldiers, and such a one has been found at Pompeii. Finally, the marks of the nails in the arms are not in the palm of the hand, but show that the nails were driven through at the level of the wrist.” The photographs have been placed on public view at the offices of the *Figaro*, where they have been inspected by a large number of persons.

In a recent communication to the Academy of Medicine of Paris, M. Regnier described a new method of producing analgesia for tooth extraction, which may some day supersede the use of cocaine, carbolic acid, or any of the present anaesthetics, all of which are more or less toxic, and involve an amount of risk out of proportion to the trifling operation of a tooth removal.

The method consists in the use of a high-frequency electric current applied to the tooth by means of a gutta-percha cap lined with gold-leaf. The field of application of the electricity is thus limited to the tooth which it is intended to extract, and in it absolute insensibility is produced within a few minutes. The use of the current in this way is easy and harmless, and should this communication be verified by further observations, it would seem possible that the same method of producing analgesia might be extended to many other operations of minor surgery.

From recent German statistics it appears that whereas the number of legally qualified practitioners in Berlin is about 2,000, there are no fewer than 476 unqualified male and female persons who pretend, by one method or other, to cure the "ills to which flesh is heir," besides an indefinite number of others who ply their nefarious trade without the knowledge of the police authorities. As might be expected, these self-constituted exponents of the healing art are, with very few exceptions, persons with no education, but with blatant effrontery enough to claim for their methods and drugs miraculous powers, which it might well be thought would, to the large mass of the public, be enough to prove their utter worthlessness. It seems, however, to be a phase of human nature the world over that it is ready to accept the unauthenticated and incredible statements of every type of pretentious quack, even the most audacious, if only the virtues of his nostrums are widely enough advertised and loudly enough proclaimed. Germany is in this respect neither better nor worse than other countries; and though the statistics referred to focus the evil as it exists in Berlin, the same method of inquiry and numerical tabulation applied to every other great centre of population would but accentuate the deplorable gullibility of the general public in regard to matters pertaining to personal and public health. It is almost alarming to contemplate the result of a careful investigation into the question of quackery as it is practised—and profitably practised—in the city of London. In every corner of this vast metropolis the self-constituted exponent of some form of infallible cure prosecutes his impudent but remunerative trade; for though the methods differ, there is little to choose between the broken-down, shabby-genteel professor who, from the lofty eminence of an up-turned beer barrel to a gaping crowd, vehemently bears personal witness to the unlimited curative powers of his fail-me-never pills, which for his love of humanity and out of gratitude for the good they have done to himself, he is willing to absolutely give away at the ridiculous price of sixpence or a shilling a box, and the correctly-attired, society-mannered proprietor or manager who presides over a sumptuous establishment in the West End, where by elaborated methods of electricity and massage, together with certain remedies the secret of whose preparation is, of course, known only to himself, the unfortunate victims of every variety of disease may, on paying a few guineas, count upon receiving early and permanent relief from miseries which are beyond the reach of the resources of legitimate medicine. And in many respects the West End establishments are a source of greater danger than the humble and illiterate vendor of pills and potions in the poorer parts of the city. Their systems of cure are generally concerned with methods of treatment that have their

legitimate use; high-frequency electric currents, superheated air, ozone, baths, massage, and endless other addenda of ordinary practice are pounded upon by these enterprising leeches of the true profession, and made the peg upon which are hung specious testimonies—which, by the way, are always unsolicited—from hopeless cases which have been cured, and suggestive promises which, alas! too often tempt the unwary and confiding sufferer from persistent or incurable disease, into the meshes thus carefully and suggestively provided for him. Unfortunately, moreover, the victim of this form of quackery is not always the *malade imaginaire* to whom if it does no good it can do no harm, and who, in the majority of cases, can afford to pay for these fanciful methods of management of a disease which has no existence but in the imaginings of a disordered nervous system; too often the alluring promises of restitution to health appeal to some poor sufferer from organic disease whose friends, in the vain hope of restoring him to vigour and usefulness, pinch themselves and deny to their families the ordinary necessities of existence that the "pound of flesh" may be paid which the extortionate Shylock of quackery demands as the ransom for the sick man's deliverance from the enemy which threatens his life. In these latter days the practice has gone even further than the kingdom of material things; it has invaded the spiritual world as well, and under the euphonious title of "Christian Science" a person called Mrs. Eddy and her disciples have had the audacity to carry the art and science of quackery in its most reprehensible form into the domain of sacred religion.

Surely the time has come when the profession should take strenuous measures to deal effectively with quackery of all sorts, and when the various legislative assemblies of the world should enact laws to better protect the art and science of Medicine and Surgery by the exemplary punishment of those who prey upon the ignorance and credulity of weak and often suffering humanity.

West Australia.

(FROM OUR OWN CORRESPONDENT).

Medico-Legal Cases—Enteric Fever in West Australia—The Australian Natives' Association and Friendly Societies.

In my former letter I made mention of the fact that the Medical Board of this State had obtained a conviction against a chemist for contravening the Medical Act by treating one of his customers for a so-called "cold in the eye." Unfortunately the evidence was not as strong as it might have been, and the conviction has been set aside in the Court of Appeal. I can only regret that the Medical Board proceeded to prosecute on such slender evidence, since other more glaring cases do occur frequently in our midst, evidence of which, however, it is very difficult to obtain.

Another interesting medico-legal case has within the last few days been also decided in the Court of Appeal. Unfortunately when the first case of plague occurred in this State, the regulations of the Central Board of Health were apparently not in good working order, and a technical trespass was committed by the Health authorities in dealing with the shop in which the first case of bubonic plague occurred. As the circumstances were those of extreme public danger, it is to be regretted that the judges have seen fit to allow the appeal and to give costs against the Health authorities. The zeal and

energy displayed by the Central Board of Health, and notably by the president, Dr. Black, at that period were no doubt responsible for the effectual stamping out of the epidemic and its non-recurrence this year in our midst. Perth, at the present time, is in a much improved sanitary state and comparatively free from all infectious diseases, and it will compare very favourably as regards its healthiness with the larger cities in the Eastern States. We are, I am glad to say, by our freedom from epidemics, and more especially that of enteric fever, disproving more and more every day the opinion which was freely expressed in the Eastern States, and is now still believed in firmly by many of their inhabitants, that this State of Western Australia generally, and the city of Perth more particularly, was, and is now, reeking with typhoid fever and other filth diseases. The population of this State is increasing rapidly again, and during the last four months over 7,000 persons have landed here in excess of those who have quitted our shores. Now, it must be evident to the intellectually-minded person that as fresh settlements are forming every day in both urban and rural districts, with in many cases a very easily polluted water supply from an archaic sanitary system, that outbreaks of typhoid fever must occur once a person suffering from that disease is introduced into any such locality. The condition of the only lunatic asylum in this State, viz., at Fremantle, has long been a disgrace to any civilised race; and I am glad to find that the prospect of obtaining a modern institution, well planned and in a suitable site, is now within reasonable hope of attainment. The care of all lunatics, all indigent and aged people, must devolve upon the State, and it is the supreme and important duty of those in authority to see that no stone is left unturned to provide suitable and modern institutions wherein such unfortunates can be housed and efficiently treated. To my mind, it would be preferable to have one large accessible site on which a comprehensive scheme, with ample room for future extensions, could be carried out, and in which all those who are dependent upon the State for their housing or treatment could be placed.

Great activity is being displayed by the Australian Natives' Association and the other well-recognised friendly societies in all parts of West Australia, more especially in the larger towns, and their activity tends rather to the detriment of the medical practitioner. We recognise the necessity of the existence of a well-conducted friendly society, but we intend to prevent, if possible, any great extension of those pseudo-friendly societies, whose great aim appears to be the lowering of the ethical standard of the medical profession by the establishment of amalgamated clubs, or, in other words, "medical-aid" institutions of a most pronounced type. Let me again utter a warning to any newly-qualified and other medical brethren who seem to imagine that West Australia is a perfect medical elysium. Fees are much lower, living much dearer, and the comforts of life very few in most of the places from which these "specious" advertisements emanate, and it behoves all would-be applicants to exercise the greatest possible discrimination and judgment before applying for any one of such vacancies. The governing bodies of such medical sweating corporations express their intentions of obtaining practitioners from the "old country" should we obtain a sufficient boycott in the Eastern States.

In conclusion, let me draw the attention of my *confrères* to the necessity of codifying the different Medical Acts at present in vogue in the States of the Commonwealth, so as to bring them into harmony and produce one comprehensive Medical Act which will apply to all the registration bodies in Australasia.

P.S.—Since writing the above paragraphs, I have to notify that two cases of bubonic plague have occurred

in Fremantle, and I trust that the local health authorities will now grapple with the insanitary conditions well known to be present in that town.

THE TRAINING OF OBSTETRICAL NURSES.

(To the Editor of the Australasian Medical Gazette.)

SIR,—The opposition to the Midwives Bill in England and to that proposed by Sir James Graham in this State was due to the belief that a class of registered but unqualified practitioners would be created, which would seriously affect not only the welfare of the general public but the pecuniary interests of the medical profession. But reflection has convinced me that the same end is being not less surely attained by the system which is at present in vogue at the various training schools for obstetrical nurses. Unless I am misinformed, all the practical instruction at these places is given by the matron or head nurses, and all the ordinary labours are conducted by the same persons, the services of honorary medical staff being only called in if any complications arise. It seems that even lacerations of the perineum are dealt with by the nurse in charge. If this be so, then the whole trend of the teaching and example must go to show the pupils that an ordinary labour can be conducted without the presence of a doctor, and that, therefore, after they have completed their course they will be fully competent to have complete charge of any case, taking it for granted that they will be able to obtain the services of a doctor in case of need.

I have a suspicion that this procedure is becoming pretty general, and with the large number of obstetrical nurses being turned out every year it will probably become more so as the struggle for existence among them intensifies. I would suggest that all these training schools should have a resident medical officer, who would give the clinical instruction and supervise the cases. Many of our young lady graduates would gladly welcome such a post, and their status as medical practitioners would duly impress the pupils.

I think the Australasian Trained Nurses' Association might move in the matter by refusing to recognise the certificates of those schools which had not a resident medical officer. I have little personal interest in this question, but nothing that affects the pockets of the medical profession is alien to me.

I am, Sir, yours faithfully,
RICHARD ARTHUR.
Maoquarie Street, Sydney.

MILITARY INTELLIGENCE.

COMMONWEALTH MILITARY FORCES.

VICTORIA.

CAPTAIN WILLIAM JOSEPH CROSS has resigned from the Victorian Rangers.

Lieutenant Walter Ernest Summons has resigned from the University Corps.

NEW ZEALAND

Surgeon-Captain Thomas Burns has resigned from the New Zealand Militia.

Surgeon-Captain Hugh Allan McClelland, of the Taranaki Rifle Volunteers, has been promoted to the rank of Surgeon-Major.

William Aloysius Conlon to be Surgeon-Captain New Zealand Volunteer Medical Staff.

THE BATTLE OF THE CLUBS.

Victoria.

THE Lodge Court Friar Tuck, A.O.F., is recognised as one of the strongest lodges in the district of Carlton. It has 306 members on its roll, and the amount paid in for medical expenses is £1 per annum for each member. It is pointed out that the court is not in a position to pay more than £1 per annum per member to its doctors and chemists without making special levies on the members. Some years ago it paid £1 per member to Dr. McInerney. Recently the amount paid was £1 3s per member, of which 8s went to the chemists and 15s to the doctors, but members objected to the latter figure on the ground that other lodges were paying only 13s, and others only 12s 6d, per annum per member.

At a special summoned meeting of the court it was therefore resolved that the doctors be given a month's notice to terminate the existing agreements. The doctors replied in a joint letter declining to accept less than the 15s per member they had been receiving. Matters were practically at a deadlock, when Dr. Lynch, a member of the Medical Defence Association, of which some of the court doctors were also members, agreed to see any of the lodge members professionally until such time as a permanent medical officer was elected. Dr. Lynch was subsequently unanimously appointed medical officer. Four other applicants were also elected, the whole agreeing to accept the reduced fee of 13s per annum per member. At the last meeting of the court the friends of the doctor to whom most of the trouble is attributed endeavoured to pass a resolution directing that a special meeting be held with the object of securing his reappointment, but the proposition was lost by 28 votes to 8.

The secretary considers that other friendly societies are indebted to Court Friar Tuck for its successful efforts to prevent an organised attempt at "raising" (!) the medical fees.

Perhaps the profession in Carlton will consider that Court Friar Tuck has taken the lead in *reducing* medical fees, and that its medical officers who have consented to accept the reduction in fees will be deserving of professional and social ostracism.

Yersin's Curative for Plague.—The Acting Federal Prime Minister has received a despatch from the Secretary of State for the Colonies stating that it is proposed to manufacture Yersin's curative syrup for bubonic plague at the country branch of the Jenner Institute in England. £3,000 will be required to equip and work a new laboratory for two years. The local government boards of Great Britain have recommended that the Imperial authorities should subscribe two-thirds of £3,000, and the colonies which have suffered from the plague are now being appealed to to provide the balance. Hongkong has undertaken to vote £636 13s 4d of this £1,000, and Mr. Chamberlain suggests that the Commonwealth should become responsible for the £333 6s 8d still required. Mr. Deakin intends to consult the State Premiers on the subject.

At a meeting of the subscribers to the Dr. Way Memorial Fund on July 9th it was decided that all funds be handed over to the council of the Adelaide University for the endowment of a chair of gynecology, to be called the Dr. Edward Willis Way Chair of Gynecology.

REVIEW OF CURRENT MEDICAL LITERATURE.

OBSTETRICS.

Three Symphysiotomies Upon One Patient.

L. Hirigoyen (*Rev. mens de Gyn., Obst. et Ped. de Bordeaux*, No. 10) reports three symphysiotomies upon the same patient, resulting in the birth of three living children. After the last operation no enlargement of the pelvis, fibrous induration, adhesions of neighbouring organs, or vascular dilatations near the symphysis were found.

Indications for Rapid Induction of Labour.

G. Fieux (*Rev. mens de Gyn., et Ped. de Bordeaux*, Nos. 8, 9, and 10) discusses the indications for rapid induction of labour. In the case of hæmorrhage, he limits it to accidental hæmorrhage, rarely employing it in that due to placenta prævia. As regards severe dyspnoea, the operation is not indicated if it be due to some mechanical condition, such as pneumonia, pleurisy, or ascitis, and in these cases treatment should be directed to the etiological condition. When of cardiac origin, medical measures should first be tried to relieve the heart, and, these failing, rapid induction of labour is favoured. Intrauterine putrefaction of the fœtus, of course, demands the operation with rapidity. In eclampsia labour is usually initiated by the convulsions, and in the 10 per cent. of the cases in which this does not occur, rapidly induced labour not only produces no ill-effect, but often greatly improves the mother's condition. The fœtal mortality of 80 per cent. in cases in which labour does not rapidly follow the convulsive attacks is reduced by the operation to 20 per cent. In cases of the apparent death of the mother near term, a Cæsarean section should only be done with all the usual precautions, as death has occasionally been found to be only apparent. If the fœtus is in bad condition and the mother not so, partial dilatation of the cervix and insertion of Champetier de Ribes' bags may suffice; if not, rapid induction of labour is demanded. In cases of maternal anthrax he does not favour this operation, and in hydrophobia advises its use only after the onset of symptoms. He is uncertain as to the indications in tetanus. Among its contra-indications he includes a general sclerotic condition of the cervix, large fibroids, or cancer of the cervix or lower uterine segment.

Anæsthesia by Subarachnoid Injections of Cocaine in the Lumbar Region.

Arnold W. W. Lea (*Journal of Obstetrics and Gynecology of British Empire*, January, 1902) contributes a very excellent and exhaustive paper on this subject, with reference to its use in obstetrics and gynecology. The literature of the subject is reviewed. The details of the method of Tuffier (who has done so much to bring this method forward) are briefly as follows:—The injection is made between the laminae of the fourth and fifth lumbar vertebrae. For this purpose a needle sufficiently long and firm to penetrate the tissues is required. Tuffier's needle is four inches long, and is best made of platinum with an iridium point. The point of the needle must be short, to avoid injury to nerve structures. The skin is made thoroughly aseptic. The patient is placed in the sitting posture, with the back well arched forward. In this position the maximum amount of separation between the laminae of the vertebrae is obtained. The spine of the fourth

lumbar vertebrae is now sought for and clearly identified. This is usually easy to do, but in stout patients, or if the spinous process is not well developed, a line joining the highest points of the iliac crests, which crosses the level of the fourth lumbar spine, may be adopted as a guide, and will be found to be reliable. The needle is now inserted one centimetre below and outside the spinous process, and directed vertically downwards and slightly inwards. It will enter the interval between the laminae of the fourth and fifth lumbar vertebrae, and penetrate the subarachnoid space, as is shown by the escape of clear cerebro-spinal fluid through the needle. An ordinary Pravaz syringe is now attached to the needle, and one centimetre of a 2 % solution of hydrochlorate of cocaine ($\frac{1}{2}$ grain) is very slowly injected. The needle is now withdrawn, and the minute puncture sealed by collodion. The strictest antiseptic precautions must be observed. It is essential that the cocaine solution be freshly made. Difficulty may arise from several factors. (1.) The needle may impinge on the bony lamina, or in cases of deformity of the vertebrae or ankylosis it may be impossible to enter the subarachnoid space. (2.) The needle may be apparently in the subarachnoid space, but as yet no fluid appears. This may be due to the point being entangled in the membranes, or the needle may have penetrated too deeply. A slight movement of rotation or withdrawal is usually sufficient to cause the fluid to run freely. (3.) Blood may appear at the end of the needle, due to injury to a vein. The needle must then be withdrawn and a fresh puncture made. The analgesia commences almost immediately, and is usually complete in five to ten minutes. In rare cases fifteen to twenty minutes may be required. The extent of the analgesia shows great variations, but it may be relied upon up to the level of the umbilicus, and usually there is complete cutaneous anaesthesia up to the ensiform cartilage. The duration of the analgesia is also somewhat uncertain. Usually it continues for an hour or a little more. It may, however, last for thirty minutes only, or up to three and a half hours. During analgesia the patient has a feeling of "malaise," respiratory anxiety, and weight at the epigastrium. Nausea occurs in 30 % of cases. In a considerable proportion this is succeeded by vomiting. The pulse is quickened and the tension lowered. After analgesia the patient usually feels very comfortable. Slight sickness may continue. Headache, which may be severe, comes on six to eight hours after the injection. A rise of temperature, accompanied sometimes by a chill, or even a shiver, occurs in about half these cases within a few hours of the operation. It is usually slight, it subsides rapidly, and is of no special significance. The cause of this rise of temperature is obscure. If during the operation there is evidence of cardiac depression or respiratory difficulty, injections of strychnine should be given. Fowler, of New York, gives a full dose of strychnine before the operation in each case. Certain details add much to the comfort of operating upon a conscious patient. Thus it is well to put cotton wool in the ears, and to place a handkerchief over the eyes of the patient. She should also be reassured at intervals during the operation. Silence should as far as possible be enjoined. This method of anaesthesia is not suitable for hysterical women, in whom the simple sensation of contact may suggest painful sensations. Cases of heart disease or arteriosclerosis bear it well (Tuffier). Clinical experience has shown that the contractions of the uterus continue regularly under the influence of cocaine. Dupaigne found that the uterine contractions were increased in force and frequency, and considered that the duration of labour was distinctly lessened. If the dose of 1 centigramme ($\frac{1}{2}$ grain) be not exceeded, the injection

is without influence on the condition of the foetus. The definite influence of cocaine on the uterine contractions limits its sphere of usefulness in obstetric practice, as when complete muscular relaxation is required for podalic version or other intra-uterine manipulations. Gueniot, in a communication to the Academy of Medicine of Paris on January 22nd, 1901, lays down the following conditions as contra-indicating its use in labour: (1) Disease of the heart or great vessels, (2) chronic disease of the respiratory organs, (3) chronic affections of the central nervous system, (4) the absence of facilities for securing complete asepsis. The same writer admits the following conditions as suitable for the use of cocaine: (1) Any obstetrical operation requiring anaesthesia, with the exception of those in which it is necessary to introduce the hand into the uterine cavity; (2) excessive pain during labour; (3) prolonged labour owing to feeble or irregular contractions of the uterus in the absence of any obstruction; (4) in conditions tending to haemorrhage, such as uterine inertia, placenta praevia, etc.

GYNÆCOLOGY.

Instrumental Perforation of the Uterus.

Wilmer Krusen (*Amer. Med.*) discusses briefly the accidental perforation during operative procedure. The uterus may be accidentally perforated by the sound, dilator, bougie, tent, or curette; or it may occur in the attempt to procure abortion by many other instruments and unusual appliances such as may be conveniently at the hands of the abortionist. There are certain conditions of the organ which favour such injury and render it more liable to occur. When the body of the uterus is the site of a carcinoma, the organ is more fragile, and the effort to obtain material for microscopic examination may prove disastrous. Atrophy, anaemia, and tuberculosis are the usual causes of abnormal fragility of the uterus. An abnormal condition of the uterine muscle may be attributed to frequently recurring pregnancies in which there is a very brief time between successive labours. Any attempt to explore or curette the uterus immediately after labour or abortion, when the uterus is subinvolved, must be made with unusual care because of the softened condition of the uterine muscle. A failure to recognise by careful bimanual examination the position of the uterus when it is either acutely ante-flexed or retroflexed may lead to injury because the operator fails to properly direct his instrument. The point of the instrument making pressure upon the cervical wall near the flexure produces rupture. No one should attempt intrauterine manipulation until he is competent to diagnose the uterine position, and the presence or absence of disease of the appendages. Much harm is done by the unwise dilatation and curettement of the uterus in cases of lateral disease. Proximity to the menstrual period, when the uterus is much congested and softened, may contribute in a high degree to the possibility of uterine injury.

The perforation may be either partial or complete; partial when the mucosa and muscular coat of the uterus are involved without injury to the serous covering; complete when the instrument passes through the three coats and enters the peritoneal cavity. The injury may be cervical or fundal.

The result of such injury may be:—

- (1.) Infection: If unclean instruments have been passed through an unclean canal, there is the possibility of septic material being carried directly into the peritoneal cavity.

- (2.) **Hæmorrhage:** The amount of blood lost depending upon the position and extent of the injury and the contractile power of the uterus.
- (3.) **Visceral injury** may occur, as when the intestine or omentum is injured by the instrument or drawn into the uterine or vaginal canal.
- (4.) There is the danger of the introduction of toxic material into the peritoneal cavity when chemical antiseptics are employed. Whenever there is a possibility of uterine injury, irrigation should not be practised, or, at least, only saline solution employed.
- (5.) Pelvic peritonitis may result.

When simple perforation of the uterus has occurred under aseptic conditions, without marked symptoms of shock or visceral injury, no operative interference is indicated. In all cases in which there is visceral complication, celiotomy should be immediately performed, and the injury repaired.

Ovarian Transplantation.

William R. Nicholson (*Univ. Penn. Med. Bull.*, Jan.), in summing up the work which has been reported on this subject up to the present time, states that it is possible to transplant ovaries either homo or heteroplastically, and that pregnancy will follow in a small proportion of cases; that there is without doubt an influence inherent in the ovaries, beyond the mere process of ovulation, which is very important for the development of the genitalia and also for their conservation. All the evidence adduced tends to strengthen the position held by the so-called conservative school, that the whole ovary, or at least a portion of it, should be left where possible.

Pigmentation of the Linea Alba.

The *Thèse de Paris*, 1901, of R. Lehman (*Presse méd.*, November 30) shows that pigmentation of the linea alba occurs under other conditions than pregnancy. He found it in about 30 % of the little girls in one of the hospitals. In these cases it is usually pale yellow, sometimes darker, and generally associated with chronic constipation or other intestinal lesion, such as typhoid, general or localised tuberculosis, or the approach of puberty. In men it occurs under the same circumstances. It is always between the umbilicus and pubes in girls, appearing before the first menstruation, and persisting if the function is not regularly established, and always suggests the occurrence of amenorrhœa, dysmenorrhœa, menorrhagia, &c. Tumours of the genitals cause this pigmentation only when they cause amenorrhœa or dysmenorrhœa. The writer considers a dark line pathognomonic of pregnancy. He believes that a line of sufficient length, breadth, and intensity conclusively proves, without other examination, that the woman has recently been pregnant. In the nullipara after puberty it nearly always indicates the existence of amenorrhœa or dysmenorrhœa, while in a little girl it points to the near approach of puberty and the first menstruation.

Early Diagnosis of Carcinoma of the Uterus.

Abel (*Arch. für Gyn.*, Bd. lxxiv., H. 2) claims that he has discovered a valuable diagnostic point between carcinoma arising from the squamous epithelium of the cervix and benign growths from the same cells. His illustrations show the presence of elastic fibres between the

cancer cells as well as around the cell nests, while in the normal epithelium or in benign growths, such as condylomata acuminata and tuberculous lesions, these fibres stop at the edge of the epithelium, and are not found between the individual cells.

Shortening the Round Ligaments through the Vagina.

C. J. Bucura (*Zeitschr. für Geb. und Gyn.*, Bd. xlv., H. 2) warmly defends this operation as it is performed by Wertheim. Of 86 cases so treated, only two had recurrence of the retroversion at the time of discharge, and these were complicated cases. Seven had since had normal labours; three had aborted; three were pregnant and comfortable at the time of writing. Of 48 cases in which this operation only was done, 16 had recurrences. While vaginofixation and Alexander's operation give better results, the former may cause complications during subsequent pregnancies and the latter sometimes hernia.

OPHTHALMOLOGY.

Older and Newer Mydriatics, Myotics, and Anæsthetics.

In the March number of the *Archives of Ophthalmology* H. Schultz has an article under the above heading. The mydriatics discussed are atropine, daturine, duboisine, hyocyamine, hyoscine, scopolamine, atropine, homatropine, gelsemine, ephedrine, mydrine (a mixture of homatropine and ephedrine), euphthalmine and mydrol. The myotics are physostigmine or eserine, pilocarpine and arecaline. The anæsthetics are cocaine, apomorphine, benzotropine, stenocarpine, toad-poison, strophanthine, erythropleine, tropacocaine, eucaine, holocaine, anæesine and suprarenal extract. So far none of the newer agents appear likely to displace atropine, homatropine, eserine or pilocarpine for general purposes. Cocaine, however, has formidable rivals in tropacocaine and holocaine, both of which are less irritating than cocaine, have no action on the corneal epithelium, and little or no effect on pupil, accommodation or tension, and both can be sterilised by boiling, and keep well. Holocaine, in 1 % solution, is also powerfully antiseptic.

In the same number Macklin writes on the cycloplegia and mydriatic action of atropine and I-scopolamine (which are probably identical in nature). He advocates their use (in oily solution) for the following reasons—(1) only one application is required; (2) more rapid and certain action of the drug. Mydriasis begins in 10 minutes, and is complete in 20; cycloplegia begins in 20 minutes, and is complete in about 50 (average); power of accommodation returns in about 5 days. Schultz thinks, however, there is no reason for replacing atropine by scopolamine generally. Solutions stronger than $\frac{1}{4}$ % are not to be employed, since they may have a toxic effect.

Treatment of Suppurative Keratitis.

In the *Recueil d'Optalmologie*, Perrin concludes his observations on his series of 32 experiments on animals, of injections of antiseptics into the anterior chamber in cases of suppurative keratitis (especially those due to staphylococcus) with iritis, hypopyon or iridochoroiditis, and is so impressed with his results that he announces his intention of employing the method in man. He recommends cyanide of mercury 1-5000. He says injections into the anterior chamber are less painful, and more rapid and certain in their action than subconjunctival injections.

Protection of Cornea in Sightless Stumps.

In Knapp's *Archives* for March, Gifford has an article, and begins by saying, "For all who believe that all sightless stumps should be enucleated, this paper can have no interest." He does not propose his operations as substitutes for evisceration or enucleation in actively infected globes, but in the class of patients who come with a quiet stump, over which a glass eye cannot be worn on account of irritation of the cornea; or on account of the danger of irritating and infecting exposed iris tissue; or when the stump is irritable solely from the degeneration of the corneal epithelium; or in patients who refuse evisceration or enucleation.

When sufficient conjunctiva is available he excises the membrane around the lower border of the cornea for an area $\frac{1}{8}$ of an inch wide at the sides, and $\frac{1}{2}$ below. Above this zone the membrane is dissected free from the globe as far as the upper fornix, where he makes a cross cut through the membrane to allow it to be slid down over the cornea without putting much tension on it. These sutures are inserted below, well into the episcleral tissue.

When the conjunctiva is atrophic or scanty he dissects the conjunctiva up for $\frac{1}{2}$ inch around the cornea, scrapes the latter, and applies a thin flap shaved from the lip with a razor, or a Thiersch flap. The flap is tucked under the conjunctiva on all sides, and both eyes bandaged for 24 hours. The lip flap is preferred to the Thiersch graft.

Parascleral Tenotomy for Strabismus.

As a result of the disastrous secondary deviations that followed Diefenbach's operation of myotomy, it has since been strongly insisted upon that in tenotomy the tendon must be snipped as close as possible to the sclera. Delamare, of Rouen, in the *Recueil d'Ophthalmologie* for November, describes his operation, in which he leaves a tag of tendon about 2 mm. long attached to the sclerotic. He claims by this method to overcome deviations of from 2 to 6 mm. (10 to 30 degrees) in adults, whereas even double tenotomy, done in the usual fashion, rarely corrects a squint of 4 mm. (20 degrees) in persons over fifteen. Tenotomy, with advancement of the antagonist, can produce as great an effect (and the particular method he commends is that of de Wecker), of tenotomy with capsulo-muscular advancement by folding (*plissement*) of the antagonist (without cutting it); but, in addition to the objections that this operation necessitates two wounds instead of one, as well as the presence of a stitch, which is sometimes irritating, besides being more tedious and painful, there is the further consideration that it requires a considerable amount of skill and experience to get good results, whereas he claims that his operation of parascleral section can be performed by the average surgeon. The steps of his operation are similar to those of the usual tenotomy, with the exception of the position of the section of the tendon. Cocaine is used. The conjunctiva is divided over the position of insertion of the tendons, Tenon's capsule is snipped through, above, below, behind, and in front of the tendon, the attachment being carried behind and in front, back to the caruncle, above to midway between the internus and the superior rectus below to midway to the inferior rectus. The tendon is then hooked up and cut with one snip 2 mm. from the sclera. The operation is applicable to divergent as well as to convergent squints, though in the divergent form the results are not so satisfactory.

NEUROLOGY.

General Paralysis of the Insane.

Schaffer (*Neurologisches Centralblatt*, 1902, No. 2) has a very interesting article on the results obtained from the

investigation of three brains of general paralytics. The article seems to have two chief points of interest. The first is that it brings pathological evidence in support of Flechsig's developmentally investigated association areas. Schaffer finds that it is just those areas which Flechsig indicates as association areas which are affected in general paralysis; he finds a constant immunity of the motor, visual, auditory, etc., areas. The second point of interest is the assertion that general paralysis is a disease of a definitely marked out area of cortex; he does not find that in one case the frontal convolutions are involved and in another the parietal, but he finds that in every case the whole of the association area is involved. Should these conclusions prove correct they will mark a distinct advance in our knowledge of the disease, and they appear to support the theory of primary nervous degeneration rather than the theory of primary vascular disease. The paper further confirms the theory advanced by Cajal (histologically), Flechsig (developmentally), and Sherrington (experimentally) that the posterior central convolution is an association and not a motor area.

Epilepsy.

Clark and Prout (*The Medical Review*, 1901) having examined 13 cases of epilepsy, and having found in all a nuclear degeneration of the second layer of the cortex, a condition of chromatolysis of the whole cortex, and an overgrowth of the neuroglia, Clark proceeds to criticise the usual modern surgical and medical treatment of epilepsy. He comes to the following conclusions:—
1. Idiopathic epilepsy with typical fits of the *grand mal* character should never be trephined with a view to improvement. 2. Idiopathic epilepsy with fits of the Jacksonian type should only be trephined if infantile cerebral paralysis is excluded, and if there is not a marked amount of family or individual degeneration. In the case of an operation the cortical area from which the fits originate must be as freely as possible removed; even when this is done only about 1 % of the cases are freed from fits. 3. Cases of traumatic epilepsy should only be trephined if the accident stands in direct causal relationship to the fits, and if the accident has occurred not more than two years previously. The prognosis, then, will depend on the amount of nervous predisposition present, and it is the more favourable the earlier the operation is performed. 4. All trephined epileptics should be treated for at least a year with bromides. In regard to the hygienic, diatetic, and medicinal treatment of idiopathic epilepsy, the writer lays stress on the following points:—
1. The bromides give the best results when combined with correct diet, regular employment, and personal hygiene. 2. Bromide is our best drug for the status epilepticus. Young patients can undergo a lessening in the number of fits, and even eventually be cured thereby; the old will at least be benefited to the extent of a lessening in the number of fits and an increase in the feeling of *bien être*. 3. If the bromides are to do any good they must be given in such quantity that the number of the fits is decreased. Warm and cold baths are recommended, and attention paid to all the systems of the body.

The Posterior Columns of the Cord.

A publication from Bechterew's laboratory describing the results of an investigation on 14 dogs whose posterior columns were divided goes to show that only sensations connected with the muscle sense pass up these columns. The dogs showed marked inco-ordination, but there was no sign of anesthesia, analgesia, etc. It was only when the grey matter of the posterior horns was

injured that anæsthesia was produced. If the posterior column of one side only was divided there resulted marked inco-ordination on the side of the lesion and slight inco-ordination on the other side. This the writer explains by supposing a decussation of a few fibres of the posterior columns.

The Bath Treatment.

W. Alter, an assistant-physician at one of the provincial hospitals for the insane in Germany, has an article on "The Bath Treatment of the Insane" (*Centralblatt für Nervenheilkunde u. Psych.*, March, 1902). In bearing testimony to the efficacy of this method of treatment he confirms what so many others have asserted who have used it. The writer seems to have been placed under rather unusually favourable conditions for the carrying out of his investigations since he had one nurse or attendant to every 2-4 patients, whereas in most hospitals the ratio is something like one to seven or eight. The temperature of the baths varied from 34° C.—36° C., and the patients were kept in for from 2 hours up to 24 hours, or longer. Usually the patients rested on a sheet suspended beneath the water, and another sheet covered the whole bath excepting at the head end. Their meals were served to them in the bath. It was found that on an average one attendant to every four patients in baths was required. The results described were such as are seldom obtained by any other method. At the commencement there were 54 patients almost all in single rooms, and after a few months none occupied single rooms; and whereas previously most were noisy, and restless the whole or part of the night in spite of the administration of drugs, after the institution of the bath treatment it was a rare thing to find a patient noisy at night. The baths also seemed to improve both the mental and physical condition of the patients. Dr. Alter is of the opinion that if the difficulty as regards number of attendants and sufficient bathing accommodation could be overcome, the bath treatment should be introduced into every hospital for the insane.

Forel (*Zeitschrift für Hypnotismus*) has an article in which he points out how the treatment of mental cases by means of gardening, etc. has degenerated into a method whereby only the physical condition of the patient is to some extent improved. He remarks that patients are very often set to do such simple work that they do it, as it were, automatically, at the same time directing practically their whole attention to their delusions. He insists that where the best results are obtained the patients are given work which requires a considerable amount of care and attention on their part, and by this means the patients' minds are trained to think and act along normal lines. Such work is not only a physical but a mental gymnastic.

UNIVERSITY INTELLIGENCE.

University of Sydney.—The following candidates were successful in the final examination for the degrees of Bachelor of Medicine and Master of Surgery, held in the commencement of Trinity Term:—Arthur Anderson, Gother R. C. Clarke, Wilfred B. Dight, Charles D. Halcomb, Rees F. Llewellyn, Walter L. Rees, Frank S. Tange, John W. Tarleton, Evan Tudor-Jones.

University of Adelaide.—The foundation stone of the Elder Anatomical and Pathological School was laid by the Governor on July 14th, in the presence of a large and representative attendance.

OBITUARY.

LAURENCE GEORGE MALLAM, M.B., C.M. (Edm.), M.R.C.S. (Eng.).

The death of Dr. Mallam, which occurred at Armidale on 19th May, has robbed the profession of a worthy and highly esteemed member, and has caused a deplorable gap in a wide circle of friends and patients. The cause of death was pneumonia, followed by heart failure. For some weeks he had suffered from a cold, and had been working at high pressure, so that he could not lie up, as his friends begged him to do. He was out nearly every night. He intended resting on the Saturday night and Sunday, but had several urgent calls on Saturday night, including one to an aged paralytic club patient some miles out in the bleakest part of his district, and on this drive he caught the chill that resulted so disastrously. Drs. Little, Samuelson, and Harris were unremitting in their attentions; and though at first little danger was apprehended, for he had a robust constitution and fine physique, alarming symptoms set in on Wednesday, and Drs. Walley, of Tamworth, and Scot Skirving, of Sydney, were telegraphed for. Before the latter could leave, however, he was stopped by a second wire saying the patient had died on Thursday afternoon. Born at Maitland in 1859, Mallam went with his parents to Armidale when four years old, and, except while away studying in the old country, his life was spent there. He received his primary education at the public school, and was afterwards at the Armidale Grammar School. In 1880 he went to Edinburgh, graduating in 1884, and in the same year took the M.R.C.S. diploma. He was a prominent member of the Australian Club in Edinburgh, and for some time acted as its honorary treasurer. As a student he was a diligent, honest worker, and had an excellent record. He took honours in several subjects, and was a demonstrator in anatomy at the University. For family reasons he had to decline Professor Turner's request that he should stay in that capacity, and returned to Armidale, where he immediately took up the practice of his profession; and by solid merit overcoming the suspicion with which a prophet is apt to be regarded in his own country, gradually but steadily built up one of the best country practices in the State, and relinquished the intention he had, before starting, of returning to anatomy teaching in Edinburgh.

Mallam was a fine type of man and practitioner. Straight and honourable in all his dealings, he was trusted by colleagues and patients. He was an estimable husband and father, a genial companion, a good comrade, and a staunch friend. Along with a kind and gentle disposition he had a hearty, cheery manner, and an ever-ready joke and laugh. Cautious and careful in his judgment and expression of opinion, he was never known to say an evil word of anyone, though to one he would speak out with a manly candour, but yet in a way that could not be resented. He was a good, all-round man at his work, and possessed of that resourcefulness that characterises the best of our country practitioners, who are so often called upon to act with skill and promptness and assume immense responsibilities under very adverse conditions. His fine sense of duty was remarkable, and though it is to be regretted that this led to his death, he died as he wished, in harness, and doing his duty to the last. Like most prudent and busy doctors, he found no time for active part in public affairs, though always interested and helpful in deserving local objects. He was for many years on the staff of the Armidale and New England Hospital, and gave a large share of his time to that institution. He was also a prominent Freemason, a member

of the Public School Board and Public Schools' Athletic Association. Though a strong supporter of the Anglican Church and a member of the Cathedral Council, he had the friendship and confidence of persons of all denominations, and was the doctor to the A.H.O. Guild for 16 years, and to the Convent. His funeral was probably the largest ever seen in Armidale (the cortege being over a mile in length), and was attended by processions of school children and public bodies, and people of all denominations, while all the shops and business places in the city were closed; and on the following Sunday eloquent tribute to his worth was paid by preachers in both cathedrals and all the churches.

Dr. Mallam was twice married; in 1888 to Miss Nellie Bradley, of Armidale, who died in 1891, leaving two daughters and one son; and in 1893 to Miss Agnes Wardrop, daughter of the late Robert Wardrop, of Mudgee, by whom he had also two daughters and one son, and who survives him. The sincere sympathy of a great number of friends goes out to the widow and children and other relatives in their loss. We are pleased to know, as was to be expected of the man, that he was mindful of his duty to his family as well as to others, and though a comparatively young man, has left them fairly well provided for.

We regret to record the death of Dr. REES LLEWELLYN, M.R.C.S. (Eng.), L.S.A. (Lond.), of Braidwood (N.S.W.), which took place on July 4th, after a lingering illness. The funeral was largely attended. All the business places were closed as a mark of respect for the deceased, who had been Government medical officer at Braidwood for 30 years.

Peter Stewart, M.D., C.M. (Glas.), died at his residence at Milton (N.Z.), on May 21st. He was seized with a stroke of paralysis on returning from a visit to a patient, and died after a few days' illness. He arrived in the colony about 28 years ago, coming straight to Milton, and started in practice. Deceased had a very varied career in his younger days, and spent many years on the Californian goldfields, graduating afterwards when well on in life. He was 75 years of age. He leaves a family of three sons.

PUBLIC HEALTH.

Tasmania.

Vital Statistics—During the month of May 131 births—71 males and 60 females—were registered in the registration districts of Hobart and Launceston. This is nine more than in the corresponding month last year, and an increase of 6.2 as compared with the average of the births registered in May during the last five-yearly period. The deaths registered in May in Hobart and Launceston numbered 65—30 males and 35 females; 21 deaths, or 32.30 % of the whole took place in public institutions. The total number of deaths registered in the two districts is five less than in the corresponding month last year, and shows a decrease of 13.6 as compared with the average number of deaths registered in May during the last five-yearly period. The deaths under five years of age numbered six, or 9.23 %, all of which were under one year of age; the deaths between five and 65 years of age numbered 28, or 43.08 %, and the deaths 65 years and upwards numbered 31, or 47.69 %. In the country districts the total was 284. The total deaths during May were 62.

Tuberculosis.—Dr. C. Crosby Walch has furnished to the Honourable the Premier an exhaustive report upon the modern treatment of tuberculosis in the sanatoria now found in many parts of the British Isles and the Continent of Europe. Dr. Walch attended the British Congress on Tuberculosis held in London last July, as the Tasmanian delegate, and since then he has visited many of the open-air sanatoria, and for a time acted as resident medical officer to the Rosclare Sanatorium in Ireland.

New South Wales.

Sydney Vital Statistics.—During the month of May, 1902, 1,181 children were born in the metropolis of Sydney, being 161 greater than the average for May during the previous five years. The deaths during the month numbered 506, or 30 less than the quinquennial average for May; the excess of births over deaths being 675. The birth rate was 2.35 per 1,000 of the population, and the deaths were 1.06 per 1,000. The true infantile mortality, or deaths under one year, the rate was 110 per 1,000. Of the 506 persons who died, 166, or 32.8 %, were under 5 years of age, and 130, or 25.7 %, were less than 1 year old; 69 deaths were of persons aged 70 years and upwards. The birth rate is the highest since 1896. The death rate is slightly above the average of the last five years. The chief causes of death were from zymotic diseases, 46 (diarrhoea 16 deaths, bubonic plague, diphtheria and typhoid 5 each). The returns of the Department of Public Health show that 54 cases of illness from typhoid and 69 cases of diphtheria were notified during the month; there were also 22 persons attacked with plague. From constitutional diseases there were 114 deaths (phthisis 49, cancer 43). The deaths from phthisis comprise 9.6 % of all deaths. Developmental diseases produced 38 deaths (premature births being responsible for 20 cases, and senile decay for 13). In the class of local diseases 257 deaths were recorded, or nearly 51 % of the death list (diseases of the nervous system contributed 46 deaths); diseases of the circulatory system, 51; of the respiratory system, 64 (pneumonia 43, bronchitis 14); of the digestive system, 56 (enteritis 33).

Newcastle Vital Statistics.—During the month of May, 1902, 175 births were recorded in the Newcastle district, or at the rate of 3.14 per 1,000 of the population. The deaths numbered 73, or 1.31 per 1,000 of population. Of the deaths, 21 were due to zymotic diseases; constitutional diseases, 9; developmental diseases, 8. There were 23 cases of typhoid fever and 5 cases of diphtheria notified during the month.

Victoria.

Melbourne Vital Statistics.—During the month of April, 1902, 1,102 children were registered in greater Melbourne; this number being higher than in any previous corresponding month since 1894, and it was 34 above the average of the month during the previous 10 years, but 39 below it if allowance be made for the increase of population. The deaths in the same month numbered 589, the births thus exceeding the deaths by 513, or 87 %, as against 86 % in April, 1901, and 84 % according to the average. The number was the highest recorded for the month during the previous 10 years, except 1892, 1893, and 1898. Children under five years of age contributed 24 % to this mortality. The deaths of infants under 12 months numbered 111. The chief causes of deaths were:—Zymotic diseases, 50; constitutional diseases, 120; developmental diseases, 44; local diseases, 322.

Vital Statistics.—The births of 1,126 children were registered in Melbourne and suburbs during the month of May, 1902. This number is higher than in any previous corresponding month since 1894, except 1898, but 58 below the average of the month during the previous ten years, and 139 below it if allowance be made for the increase of population. The deaths registered in May numbered 575; the births thus exceeded the deaths by 551, or 96 per cent., as against 72 per cent. in May, 1901, and 109 per cent. according to the average. The number of deaths was the highest recorded for the month during the previous ten years, except 1892, 1898, and 1901. It was also 9 above the average of May during that period, but 30 below it allowing for the increase of population. To every 1,000 of the population of the district the proportion of births registered was equivalent to 26.43 and of deaths registered to 13.50 per annum, as compared respectively with averages of the same month in 1901, of 25.48 and 14.80 with averages of the month during the last ten years of 28.61 and 14.22. The deaths of infants under twelve months numbered 100, as with 97 in May, 1901. The rate of infantile mortality was 88 per 1,000 births registered in the month under review, as compared with 72 in May, 1900; 85 in May, 1899; 108 in May, 1898; 84 in May, 1897; 106 in May, 1896; 88 in May, 1895; 79 in May, 1894; 91 in May, 1893; and 76 in May, 1892. The chief causes of deaths were—Zymotic diseases, 31; constitutional diseases, 127 (cancer 42, phthisis 61); developmental diseases, 58 (premature birth 26, old age 25); local diseases, 302 (diseases of the nervous system 65, diseases of the circulatory system 71, diseases of the respiratory system 66, diseases of the digestive system 57).

Queensland.

Bubonic Plague.—The total number of cases reported to date is 81; total number of deaths, 25; total discharged recovered, 56. No case of plague has occurred within the State since May 31st last.

Vital Statistics.—During the month of April, 1902, 148 births were registered in the district of Brisbane, the number being 62 less than in the previous month of March. During the same month 112 deaths have been recorded in Brisbane, the excess of births over deaths being 36. The number of deaths was 56 more than was registered in the previous month of March; 55.00% of the deaths within the municipality of Brisbane were of children under five years. The chief causes of deaths were—Zymotic diseases, 20 (plague 8, typhoid fever 2, diarrhoea 6); constitutional diseases, 25 (phthisis 11, tubes mesenterica 6, cancer 4); local diseases, 79 (diseases of the nervous system 12, diseases of the respiratory system 12, enteritis 21).

South Australia.

Vital Statistics.—There were 759 births registered in South Australia, exclusive of the Northern Territory, in the month of April, 1902. This was the greatest number during the last six years, the years 1897 and 1899 excepted. The deaths during the same month numbered 355, the greatest number during the last six years, the year 1899 excepted. The chief causes of deaths were—Zymotic diseases, 63 (enteric fever 11, diarrhoea 17); constitutional diseases, 54 (cancer 18, phthisis 25); developmental diseases, 34 (old age 37); local diseases, 152 (diseases of the nervous system 17, diseases of the circulatory system 43, pneumonia 14, enteritis 19).

City of Adelaide Vital Statistics.—There were 102 births registered in Adelaide during the month of April, 1902, the highest rate during the last six years, the year 1900 excepted. During the same month 82 deaths were recorded, the highest mortality during the past six years, the year 1898 excepted. The chief causes of deaths were—Zymotic diseases, 15; constitutional diseases, 11; developmental diseases, 9 (old age 8); local diseases, 37 (diseases of the circulatory system 13, pneumonia 6).

HOSPITAL INTELLIGENCE.

Melbourne Hospital.—At a board meeting held recently the hon. medical and surgical staffs conferred with the committee in reference to tenure of office and increase of the numerical strength of the staffs. Dr. Springthorpe presented the following resolutions carried by the honorary medical and surgical staff on the 18th June, 1902:—"1. That the retiring age for indoor physicians be 65 and for indoor surgeons 60; but that as regards the present indoor members, their appointment be for thirteen years from expiry of present term of office in the case of those members who shall not have reached the age of 65 as indoor physicians and the age of 60 as indoor surgeons. 2. That vacancies for the indoor staff be filled by promotion from the out-patient staff by seniority, according to hospital rule. 3. That vacancies in the out-patient staff be filled by the subscribers. 4. That the number of beds be increased. 5. That there be five in-patient physicians and five in-patient surgeons, and that the number of the out-patient staff be the same as at present." In submitting the resolutions arrived at, Dr. Springthorpe said that the present method of electing medical officers by the subscribers was most unsatisfactory. It had been the cause of a good deal of public scandal, and was recognised by the profession as carrying with it a great deal of professional disgrace. It was also unsettling to the staff, and militated against the performance of the best work. If security of tenure were assured the members of the hon. medical staffs would, he felt sure, disassociate themselves from other institutions, and work only for the Melbourne Hospital.

Prince Alfred Hospital, Sydney.—Dr. S. H. Hughes having resigned his post as honorary assistant surgeon in the ophthalmic department, applications have been invited from candidates for the position. The appointment of Mr. William Epps as secretary has been confirmed.

The Sydney Hospital.—Plans for the erection of new casualty rooms and large waiting-room for casualty patients are being prepared, and it is probable that tenders will be called shortly for the erection of the buildings, which it is estimated will cost about £1,500. It is proposed to place the new buildings at the rear of the hospital, and the entrances will be from the Domain. When the new buildings are completed it is expected that no casualty cases, unless of a very urgent or serious nature, will be taken in at the Macquarie-street entrance to the hospital.

Hospital for Sick Children, Sydney.—The plans for the erection of the new hospital have been under consideration for some time, and are promised by the architect within six weeks from the time when the land given by the Government as a site for the new hospital is transferred, and a portion of land adjoining the site purchased. In the meantime, the accommodation for out-patients at Glebe Point has become totally inadequate to the requirements, and the Board has

secured a suitable position for a new building for an out-patients' department, near the Redfern Railway Station. This will be up to date in all its arrangements, and will be worked for the present in connection with the old hospital, and with the new hospital when it is built. It is expected that it will be completed in six months.

Hobart Hospital.—At the meeting of the board last month, a report from the building committee relative to the building of an isolation hospital was considered. The Chairman, in moving the adoption of the report, explained that the new hospital would be for the reception and isolation of patients suffering from infectious diseases. When erected, it would leave the hospital block at the rear fully available as a women's hospital, which was very desirable. The new buildings would meet all general requirements as a reception and isolation hospital, and would be the means of relieving the general hospital of the treatment of patients with such dangerous diseases, which were a menace to other patients in the same building. In case of an epidemic, the patients suffering from it would be taken away from the city by the Government. The committee hoped the board would agree to their report, so as to secure a commencement of the work with as little delay as possible. The motion was unanimously agreed to.

Women's Hospital, Melbourne.—The receipts for maintenance for the first eleven months of the current financial year are £1,236 4s 10d less than for the corresponding period of last year, and the expenditure is £671 11s 10d greater, making a total difference of £1,907 16s 8d. The proposed effort to raise funds for the erection of additional accommodation has been postponed, and an immediate special effort is to be made to raise money to put the maintenance fund in credit. Failing this, some of the wards must be closed. Dr. Martell, who has been temporarily discharging the duties of resident medical officer of the midwifery department, has resigned her position. At the meeting of the committee the resignation was accepted with deep regret. The question of appointing a successor was discussed, and it was suggested that the committee should at once invite applications for the position from medical men outside Victoria. In the absence of a full attendance of members, however, it was deemed best to defer consideration of the matter.

The Coast Hospital, Little Bay.—The annual report of the chief medical officer to the Government on this hospital states that the number of patients in the institution at the end of December, 1900, was 233; during 1901 there were admitted 2,688; the total number under treatment having been 2,921. Of this total 2,469 were discharged and 169 died, the mortality being 5.75 %. The average daily number of beds occupied for the year was 255.5. The annual cost per bed was £64 17s 8d. The gross expenditure for the year was £16,577 19s 6d. From the medical officer's report it appears that there was an increase in the number of patients during 1901 as compared with 1900 of 345, while the mortality in 1901 was 5.75 %, and 5.2 % in 1900. The number of enteric fever cases admitted during 1901 was 214, as against 247 in 1900; of measles, 146, as against 29; of chicken-pox, 11, as against 9; of scarlet fever 192, as against 125; and of diphtheria 72 last year, as against 10 in 1900.

North Shore Hospital, Sydney.—The foundation stone of the new building was laid by His Excellency Sir Harry Rawson, K.C.B., the State Governor, last month. The site of the new hospital is in close proximity to the St. Leonards railway station. The estimated cost

is about £20,000 for that portion now in course of construction, consisting of two wards for male and female patients, and two isolation wards providing accommodation for about 44 beds. The block plan shows pavilions on an axial line bearing north-north-east, so that all sides shall have the advantage of the sun during the day. The pavilions are so arranged as to provide for completion in three distinct stages. The completed hospital will cost about £50,000. The buildings will be carried out in brick, with stone dressings, the design being Renaissance. The whole will be roofed with slates. The ventilation is to be carried out on the Tobin system, and an exhaust fan will be provided to pump all vitiated air from the wards.

PERSONAL ITEMS.

Dr. HAROLD BROWNE, of Summer Hill, wishes us to announce that he is not leaving his district, but only removing to another house in the same street.

Dr. T. A. GRIEVES, who was engaged by the New South Wales Board of Health as an expert for the diagnosis of plague cases, has resumed practice at Wahroonga.

Dr. S. T. KNAGGS has gone on a trip to Japan.

Dr. O. H. REDDALL, who recently resigned as medical officer of the Foresters' Lodge at Randwick after 14 years' service, has been presented, on behalf of the members, with an electric battery and instruments used in connection with operations for the nose, throat, and ear.

Dr. WOLFHAGEN, of Hobart, has been appointed Consul for Germany in Tasmania.

Last month Dr. W. G. ARMSTRONG, medical officer of health for the metropolitan district of Sydney, was presented with an illuminated address by the sanitary inspectors as a mark of their appreciation of the friendly relations which had existed between them. The presentation was made by Dr. Ashburton Thompson, president of the Board of Health.

Dr. FISHER has been appointed a temporary hon. medical officer at the South Brisbane Dispensary (Brisbane Hospital).

Dr. SUTTON has resigned the position of hon. medical officer to outpatients, Brisbane Hospital.

The University of Dublin has conferred upon Dr. J. J. POWER, of Sydney, the degrees of Master of Arts and Doctor of Medicine.

While out riding recently, Dr. LEO KENNY, of Melbourne, was thrown from his horse, and had his thigh fractured.

J. MORISON GARDINER, M.B., Ch.B., D.Ph. (Camb.), has succeeded to the practice of Dr. ROBERT SCOTT, of Ballarat (Vic.).

Dr. REID, late of Palmerston North (N.Z.), has gone for a trip to Japan.

Dr. G. GILLON, lately of Pahiatua (N.Z.), has begun consulting practice in Auckland.

Dr. A. LANG MURRAY has commenced practice at Lindfield, near Sydney.

Dr. HALFORD, medical officer to the Joint Epidemic Board of Brisbane, has issued a writ claiming £20,000 damages from Mr. Pound, the Government Bacteriologist, for defamation of character.

Dr. R. J. BULL has been appointed resident medical tutor at Trinity College. Dr. Bull had a distinguished course at Melbourne University, and was appointed by the Victorian Government to represent that State at the Tuberculosis Conference held in England in 1901.

Dr. E. W. FAIRFAX has commenced practice at 5 Lyons Terrace, Hyde Park, Sydney.

Dr. W. H. READ has commenced practice at 215 Macquarie Street, Sydney.

The Hon. Dr. C. F. MARKS, who has been chief medical officer of the A.M.P. Society in Queensland for the past 20 years, has been presented by the office staff with a travelling bag with silver-mounted fittings prior to his leaving on a trip to the old country and America.

Dr. THROWER, having disposed of his practice at Delegate (N.S.W.) to Dr. Vandeleur Kelly, has left for West Maitland.

Dr. HENRY CROKER GARDE has resigned his appointment as official visitor to the Reception House at Maryborough (Queensland).

Dr. A. H. E. WALL, formerly a student at the Wellington College (N.Z.), has been appointed house surgeon at Guy's Hospital, London.

Dr. W. E. HARRIS, late Resident Registrar and Anaesthetist, Prince Alfred Hospital, Sydney, has succeeded to the practice of the late Dr. Mallam at Armidale.

Mr. BERNARD JOB, masseur, of Sydney, is accompanying Lord Hopetoun to Vancouver, and will be absent from Sydney until September 16.

HUDSON'S "EUMENTHOL" JUJUBES (Registered) are a Gum Jujube containing the active constituents of well-known Antiseptics, Eucalyptol, Thymus Vulg., Pinus Sylvestris, Mentha Arv., with Benzo-Borate of Sodium, etc., and exhibit the antiseptic properties in a fragrant and efficient form. Sold by all chemists, tins 1s. 6d. Are Antiseptic, Prophylactic, reduce Sensibility of Mucous Membrane.

Mr. W. A. Dixon, F.I.C., F.C.S., Public Analyst of Sydney, after making exhaustive tests, says:—"There is no doubt but that 'Eumenthol' Jujubes have a wonderful effect in the destruction of bacteria and preventing their growth. . . . I have made a comparative test of 'Eumenthol'."

MEDICAL APPOINTMENTS.

NEW SOUTH WALES.

Armstrong, Dr. W. G., to be Lecturer in Infectious Diseases, Disinfection, and Sanitary Law at the Sydney Technical College.
Hankins, G. T., M.R.C.S.E., L.S.A. Lond., to be a member of the Medical Board of New South Wales.
Hardcastle, Cooper, M.B. and M.S. Edin., to be Government Medical Officer and Vaccinator at Hillgrove, *vice* Dr. Massey, resigned.
Hill, Reginald Horace, J.S.A., Lond., to be Government Medical Officer and Vaccinator at Tocumwal, *vice* Dr. S. B. Eadon.
Palmer, Dr. Arthur, to be Teacher of Physiology at the Sydney Technical College, *vice* Dr. R. E. Roth, resigned.
West, Francis William, M.B., M.Ch. Syd., to be Government Medical Officer and Vaccinator at Camden, *vice* Dr. G. L. Bell, resigned.

VICTORIA.

Barrett, James William, M.D., to be a member of the Medical Board of Victoria, *vice* William Snowball, M.B., deceased.
Brett, Dr. John, to be President of the Medical Board of Victoria, *vice* Dr. Thomas Rowan.
Iredell, Mr., to be Honorary Surgeon to the Department for Diseases of the Ear, Nose, and Throat at St. Vincent's Hospital, Melbourne, during the absence on leave of Dr. A. L. Kenny.
Jackson, Dr., to be Honorary Oculist to St. Vincent's Hospital, Melbourne, during the absence on leave of Dr. A. L. Kenny.
Johnson, Charles Harold, M.D., to be Public Vaccinator for the North-Eastern District, *vice* F. C. Acton, M.B.
Kennedy, Dr., to be Port Health Officer at Geelong, *vice* Dr. Pincott, retired.
Mackenzie, John Hugh, F.R.C.S., to be Officer of Health for the Shire of Bulla, *vice* John Binney Hay, M.B., resigned.
Marr, Joseph Bell, L.R.C.P., to be a Public Vaccinator for the South-Western District.
Meares, Albert George, L.R.C.P., to be Public Vaccinator for the South-Western District, *vice* J. F. Matthews, M.R.C.S., resigned.
Scott, James Andrew Neptune, M.B., to be a Public Vaccinator for the North-Western District, *vice* R. C. Brown, F.R.C.S., resigned.
Scott, John Daniel King, M.B., to be a Public Vaccinator for the South-Western District, *vice* J. C. Johnston, resigned.
Shanasy, Thomas, L.R.C.P., to be a Public Vaccinator for the North-Western District, *vice* Edward Ryan, M.B., resigned.
Thwaites, Johnstone Simon, M.B., to be Officer of Health for the Shire of Mansfield, *vice* William Amherst Henry Barrett, L.R.C.P., resigned.
Tighe, John Michael, L.R.C.P., to be Officer of Health for the city of Hawthorn during the absence on leave of John Edward Andrew, L.R.C.P.
Williams, Dr. John, to be a member of the Council of the University of Melbourne.

SOUTH AUSTRALIA.

Fooks, Edward Verdon Russell, M.R.C.S., L.R.C.P., to be a Public Vaccinator.
Reisemann, Charles Henry, M.B., to be a Public Vaccinator.

WESTERN AUSTRALIA.

Iok, Dr. T. E., to be Officer of Health at Broad Arrow, *vice* Dr. R. P. Brown, resigned.
Kelsell, Dr., to be a Member of the Victoria Public Library and Museum Committee, *vice* Sir A. C. Onslow, resigned.
Shaw, Athelstan J. H., M.A. M.D. B.C. Cantab., to be a member of the Dental Board, *vice* Dr. Adam Jameson, resigned.

QUEENSLAND.

Dods, Joseph Espe, M.B., &c., to be Medical Officer at Brisbane, Health Officer for the Port of Brisbane, and Visiting Surgeon to the Prisons at Brisbane, to the Fortitude Valley Police Gaol, to the St. Helena Penal Establishment, to the Lock Hospital at Brisbane, and to the Dunwich Benevolent Asylum, *vice* Charles James Hill Wray, L.R.C.P. and S. Edin., deceased.

NEW ZEALAND.

Macdonald, Hugh, M.B. C.M. Edin., to be Resident Commissioner, Rotuma, and Stipendiary Magistrate and Health Officer for the district of Rotuma.

TASMANIA.

Savage, Dr. Vincent W., to be a Vaccinator for the District of Zeehan.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

NEW SOUTH WALES.

Anderson, Arthur, M.B. M.Ch. Syd. 1902.
Capper, Harold Selwyn, M.D. Lond. 1901, L.R.C.P. Lond. 1899, M.R.C.S. Eng. 1899, D.P.H. Camb. 1901.
Clarke, Gother Robert Carlisle, M.B. M.Ch. Syd. 1902.
Dight, Wilfred Billingsley, M.B. M.Ch. Syd. 1902.
Llewellyn, Rees Frank, M.B. Syd. 1902.
Morrison, David, M.B. B.S. Lond. 1894, L.R.C.P. 1895, M.R.C.S. 1895.
Rees, Walter Llewellyn, M.B. Syd. 1902.
Shorney, Albert Frank, M.B. Melb. 1899, B.Ch. 1901.
Tange, Frank Septimus, M.B. M.Ch. Syd. 1902.
Tarleton, John Willington, M.B. Syd. 1902.
Tudor-Jones, Evan, M.B. M.Ch. Syd. 1902.
Walch, Charles Nash Crosby, L.R.C.P. Lond. 1893, M.B. Durh. 1893, M.R.C.S. Eng. 1893.

For Additional Registration.

Deck, John Northote, M.Ch. Syd.

QUEENSLAND.

Crozier, William, L.M. K. Q. C.P.I. 1877, L.R.C.S.I. 1877.
Fearnley, Warren James, M.B. B.S. 1901, Univ. Melb.
Gullett, Lucy Edith, M.B. 1900, M.Ch. 1901, Univ. Sydney.
Hoare, William Wallis, M.R.C.S. Eng. 1893, L.R.C.P. Lond. 1893, M.D. 1901 Univ. Brussels.

For Additional Registration.

MacLeod, Roderick Alexander, M.D. 1901 Univ. Glasg.

SOUTH AUSTRALIA.

Shackell, Percy Moira, M.B. Melb. 1900, B.S. Melb. 1901.

WESTERN AUSTRALIA.

Smith, Amy Jane Guy, M.B. Lond. 1900.
Stock, William Henry, L.F.P.S. 1867, L. and L.M. K. and Q. C.P.I. 1868.

TASMANIA.

Barrett, William Amherst Henry, L.S.A. Lond. 1884, L.R.C.P. Lond. 1886, L.R.C.S. Edin. 1890.
Holmes, Horace Isles, M.B. Melb. 1901, B.S. Melb. 1902.
Massey, Henry, M.R.C.S. Eng. 1882, L.R.C.P. Lond. 1882.

BIRTHS, MARRIAGES AND DEATHS.

BIRTHS.

COURTNEY.—On June 13, at "Lynmore," Learmonth, the wife of Dr. C. A. Courtney—a daughter.
FRANCIS.—On May 19, at Bundaberg, the wife of T. W. Francis, M.R.C.S. (Eng.), L.R.C.P. (Lond.)—a son.
GIBBS.—On June 2, at Wattle-tree Road, Malvern, the wife of Richard Horace Gibbs, F.R.C.S., L.R.C.P. (Edin.)—a son.
HOLT.—April 13, at Warwick (Q.), the wife of Dr. A. C. Holt, of a daughter (Phyllis Violet).
HOPE.—June 19, at Colac, the wife of W. W. Hope, M.B.—a daughter.
KERR.—At Forbes (N.S.W.), the wife of Dr. David Kerr—a son.

MARRIAGES.

BUSBY—MOORE.—June 11, 1902, at Wesleyan Church, Burwood (N.S.W.), by the Rev. E. J. Rodd, assisted by Rev. J. G. Middleton, Hugh Busby, M.B., Ch.M. Syd., of Gulgong, eldest son of Alex. Busby, Esq., Murrumbidgee, to Ethel, eldest daughter S. W. Moore, Esq., M.P., Karoola, Ashfield.
HARDMAN—AFFLECK.—Wednesday, April 23, at St. James' Church, Sydney, by the Rev. Charles Edward Amos, Robert R. Hardman, M.B., to Ada C. Affleck, M.B., Ch.M.
HYAM—SHIELDS.—On May 17, at Katoomba, N.S.W., by the Rev. St. Clair Bridge, Arthur Sydney, second son of the late Hon. S. H. Hyam, to May Agnes, widow of C. J. Shields, M.B., F.R.C.S.

JUTTNER—HAYNES.—On the 3rd June, at the Adelaide chapel of the Collegiate School of St. Peter, by the Rev. J. C. Haynes (father of the bride), Frank Julius Edward Juttner, M.B., Ch.B., of Tanunda, to Florence Maybell Birrell Haynes, of St. Peters.

ROBERTSON—ANDERSON.—On June 21, at St. Arnaud, by the Rev. Henry T. Hull, Alexander Robertson, jun., M.B., C.M., eldest son of Alexander Robertson, M.D., F.F.P.S.G. Glasgow, to Bertha Janet, second daughter of the late James Anderson, manager of the London Chartered Bank, Maryborough, and of Mrs. Anderson, William Street, South Yarra.

WILSON—BROOKMAN.—On June 4, at Christ Church, North Adelaide, by the Very Rev. Dean Marryat, Thomas George Wilson, M.B., Ch.M., F.R.C.S.E., second son of C. G. Wilson, Esq., of Armidale, N.S.W., to Alice May, only daughter of the Hon. George Brookman, M.L.C., of Ivanhoe, Gilberton, South Australia.

DEATHS.

IRWIN.—June 17, at Singleton, Phoebe, beloved wife of Dr. William Irwin, and eldest daughter of Dr. S. T. Knaggs.

LLEWELLYN.—July 2, at his residence, Braidwood, Dr. Rees Llewellyn, aged 59 years.

MALLAM.—June 19, at his residence, "Lalonia," Armidale, from pneumonia, Lawrence G. Mallam, M.B., second son of H. G. Mallam, aged 42 years and 9 months.

SIMMONS.—On June 26, at his residence, "Larra," 31 Alma Road, St. Kilda, Edward Lamburn Simmons, F.R.C.S.E., the beloved husband of Frances Mary Simmons; aged 64 years.

THOMSON.—On June 10, after a short illness, Ellen Thomson, late beloved wife of Dr. James Service Thomson, of 370 Park Street, South Melbourne.

NOTICES.

THE "GAZETTE" IS EDITED FOR THE PROPRIETORS BY
GEORGE E. RENNIE, M.D., SYDNEY, N.S.W.;

AND FOR THE OTHER BRANCHES OF THE
BRITISH MEDICAL ASSOCIATION BY

A. B. BROCKWAY, BRISBANE, Q.; H. W. BRYANT,
WILLIAMSTOWN, VIC.; J. B. GUNSON,

ADLAIDE, S.A.; HERBERT HORROCKS, PERTH, W.A.

ORIGINAL ARTICLES WILL BE INSERTED SOLELY ON CONDITION THAT THEY ARE NOT CONTRIBUTED TO ANY OTHER PERIODICAL.

SPECIAL NOTICE.—ORIGINAL ARTICLES FOR INSERTION IN THIS "GAZETTE" SHOULD REACH THE EDITOR ON THE 3RD, OTHER COMMUNICATIONS NOT LATER THAN THE 7TH, AND CORRECTED PROOFS ON THE 12TH OF EACH MONTH. FAILING THIS, THE EDITOR WILL NOT BE RESPONSIBLE FOR NON-INSERTION OR PRINTERS' ERRORS. VERY LENGTHY COMMUNICATIONS WILL ONLY BE INSERTED WHEN SPACE PERMITS.

Dr. H. Skipton Stacy, 28 College-street, Sydney (late Resident Pathologist Sydney Hospital), examines pathological specimens, including Blood (Widal's reaction, corpuscular count, bacteriological examination of, etc.), Sputum, Urine, Tissues, and Throat Swabbings.

MALE ATTENDANT for mental, inebriate, or general cases, seeks engagement. References and testimonials show 13 years' experience, including five years as attendant at Callan Park Hospital for Insane, three years as wardman in charge of Singleton Hospital. Address J. HILES, 161 Cecily Street, Leichhardt.

TRAINED MALE NURSE seeks engagement in mental or ordinary medical cases. Has had considerable experience in mental nursing, massage, etc., and is accustomed to travelling with patients to Europe and in the Australasian States. Unexceptional testimonials. References kindly permitted to Drs. F. N. Manning, Jarvie Hood, W. E. Warren, T. S. Dixon.

Address: R. T. O'NEILL, 68 Crown Street, near William St. (Late 17 Leicester St., Sydney.)

AUSTRALASIAN MEDICAL GAZETTE.

PERITYPHLITIS OR APPENDICITIS.

By Jos. C. Verco, M.D. (Lond.), F.R.C.S. (Eng.),
Adelaide.

I WILL read brief notes of two cases of inflammation of the parts about the appendix and cæcum, so as to emphasise one or two points in diagnosis and treatment of this very variable disease. The first is an instance of *Appendicitis producing an abscess in the right hypochondrium*.

I was called in consultation, to see a woman, aged 58, who had been ailing for two or three weeks. She had a temperature of 100°F.; was not jaundiced; had no bile, sugar or albumen in her urine; no cough, and no affection of her heart or lungs. In the right hypochondrium, in the nipple line, there was a resisting mass, quite as large as a fist, moderately tender, not prominent, not very hard, with obscure margins not separate upwards from the edge of the liver, and rather resonant on percussion. It was not simply a distended gall-bladder, as its shape was not pyriform; it had not a definite outline, and there was pyrexia. The diagnosis given was an inflammation in the region of the gall-bladder, probably starting from a cholecystitis, and possibly originating from gallstones, though no history of biliary colic could be elicited. It seemed to be not a hepatic abscess, because the swelling had no definite margin, and the liver did not appear to extend below so as to include it, and there had been no previous dysentery. I did not think it was an appendicitis, because of its situation just below and attached to the liver, because of the absence of any intestinal derangement, and the freedom of the region of the appendix from any evidence of disease. There was no tenderness or swelling in the right iliac region, and per vaginam or per rectum no pelvic abnormality could be detected. A serious prognosis was given, and the necessity for incision was suggested unless resolution occurred.

Two days subsequently the doctor was called to see her, as she had been seized with a sudden severe pain in the abdomen. He found her collapsed, in great pain, and with rigid abdominal muscles. He ordered her removal to a private hospital, where I saw her again within a few hours. Her pulse was then scarcely perceptible at the wrist, about 140, her hands were cold, there was general abdominal tenderness, and no lump was palpable where it was found previously. A ruptured abscess was diagnosed. She was at once put under ether, the abdomen was opened by a vertical incision

over the site of the swelling. The omentum was adherent to the abdominal wall and to the underlying large intestine, which appeared to be the hepatic flexure of the colon. On separating these from the parietes, there was a free flow of malodorous puriform serous fluid. The omentum and bowels were adherent to the lower edge of the liver. Getting to the right of the bowel, a lump as large as a mandarin orange was felt behind it, and a slough was visible presenting at a small opening in the mass. Drawing on this a narrow tube-like slough was extracted, and the finger in the aperture could feel a foreign body like a gallstone about as big as a pea. The gall-bladder was felt higher up under the surface of the liver; its fundus was not attached to surrounding parts, and it was natural but for some thickening of its walls. An incision was made through the loin, and a drainage tube carried into the abscess cavity; the peritoneal cavity was washed out with warm saline solution, and the anterior abdominal wound was closed. She lived for four days. At the post mortem the large intestine in the right hypochondrium proved to be the cæcum. Behind this lay an abscess over the lower end of the kidney; the ilium was in the pelvis, and ascended vertically over the brim to join the cæcum a little below the kidney. About three-quarters of an inch of the appendix remained attached to the caput coli, its lumen was patent, and it opened at the ulcerated distal end into the cavity of the abscess. The gall-bladder and the cystic and common ducts were healthy. The slough was the appendix, and the foreign body was an appendicular concretion.

The case conveys some valuable lessons:—

1. An abscess presenting apparently in the region of the gall-bladder and with no manifestations in the iliac region may be due to an appendicitis. The absence of a history of biliary colic should rather negative its biliary origin and suggest appendicitis, which would be supported by freedom from icterus and biluria. While gallstones would be more probable than appendicular trouble in a woman of 58, age does not by any means preclude the latter.

2. Immediate operation is advisable in probable suppuration about the gall-bladder. Although from the situation of this abscess, deep in the lumbar region between the bowel and the kidney, it would have been a difficult one to deal with and to drain efficiently, still if it had been attacked before bursting it

would have been of a much greater size and might have been more readily reached from the front, and might have been stitched to and drained through the anterior abdominal wall.

3. The difficulty of deciding even when the abdomen is open what is being dealt with. With an abscess so near the gall-bladder, and a foreign body of the size and shape and colour of a gallstone, how naturally would one suppose he was dealing with the consequences of a calculous cholecystitis. The slough, in the shape of a tube, if encountered will, however, suggest an appendix, even close to the liver, and the foreign body will then be recognised as an appendicular concretion.

The second case is an example of *Post cecal abscess with marked paroxysmal abdominal pains*.

M. V., girl, aged 9, was taken ill on the night of August 6th, 1900, with vomiting, which continued during the 7th, 8th, and 9th, after which date she was not sick. Her temperature was first taken on the 10th, and was found to be raised. From that time until I first saw her, on the 14th, it ranged up to 101·2, being always lower in the morning than at night. A lump was found midway between the navel and the anterior superior spine of the ilium, extending upwards and outwards through the right loin towards the ribs, obscure and tender. She suffered from definite attacks of griping pains, which seemed to come up to the tumour and cease. She had had poultices applied; these were continued. Her bowels were moved by enemata, and she was given morphia by the mouth for the relief of pain. Her pulse was 104, respirations 24. During the next four days her condition did not improve; her temperature rose to 102°, the swelling became slightly larger, and while the front of it was resonant there was an indistinct sensation of fluctuation in the flank. She was moved into the private hospital, Wakefield-street, and under an anæsthetic I cut down in the right loin, separated the fibres of the abdominal muscles, struck pus with a needle behind the cæcum, laid the abscess open and drained it with a rubber tube. There was considerable discharge of fœtid pus; the tube was left out on the tenth day. The griping paroxysmal pain did not leave her for some days. She left the hospital at the end of a fortnight, was kept quiet for a week or two at home, and has had no trouble of any kind with the bowel since, now nearly two years ago.

One circumstance which impressed me in this case was the severity of the tormina. The griping pains came in paroxysms, which lasted for half-an-hour, then disappeared for a considerable time. During the half-hour there

would be very many of these twisting pains moving up towards the tumour, and making the little patient cry out. These are referred to in textbooks as a symptom of intussusception, and as distinguishing it from perityphlitis. It must not, however, be regarded as pathognomonic. It certainly occurs in children in a very marked degree in the latter disease. Its presence and intensity gave me a little uneasiness about my diagnosis. But the fixity of the tumour which could not be moved, its obscurity of outline, the absence of mucous sanious stools, and the high temperature made me fairly certain it must be a perityphlitis, and not an invagination. The occurrence of such tormina is comprehensible enough in a typhlitis. There is more or less obstruction of the bowels at the cæcum, or colon, or ilio-cæcal valve, due to inflammatory exudation or to abscess pressure, or to accumulation of the fæces: and this will determine tormina in the ilium. These must therefore be regarded as quite a possible symptom in appendicitis, and not reliable for diagnosing it from intussusception.

The points of diagnosis between perityphlitis and intussusception might be given as follows:—

A mass is palpable in the right iliac region, extending in the direction of the ascending colon. Which of the two complaints is it?

1. In intussusception the lump may be quite free from tenderness; in perityphlitis it may be so acutely tender as to render manipulation impossible.
2. In intussusception the mass may be well defined, easily and distinctly mapped out; in perityphlitis its limits may be very obscure.
3. In intussusception the sausage-shaped body may be so movable as to be rolled about in the abdomen; in perityphlitis it is quite fixed.
4. In intussusception the right thigh can be extended without pain; in perityphlitis it may be kept flexed, and passive extension inflicts pain.
5. In intussusception there is generally frequent movement of the bowels with sanious mucous stools; in perityphlitis the bowels may be confined.
6. In intussusception there are marked tormina, the pains seeming to focus in the lump; in perityphlitis these may be absent (sometimes, however, they are present, and severe).
7. In intussusception the temperature may be normal or subnormal; in perityphlitis it is raised.

Another point may be referred to, namely, the site of operation. When the front of the swelling is distinctly resonant, and the trouble appears to be chiefly behind the bowel—post cæcal—the operation wound is better placed well to the back. The abscess can then be struck without opening the peritoneal cavity. Should it prove necessary, the incision can easily be extended forwards so as to allow of operation from the front. In my case the anterior extremity of the oblique incision was three-quarters of an inch behind the spino-umbilical line.

[Read before the South Australian Branch British Medical Association.]

TWO CASES OF DOUBLE GLAUCOMA, WITH REMARKS ON ETIOLOGY.

By J. Lockhart Gibson, M.D. Edin., M.R.C.S. Eng.,
Hon. Ophthalmic Surgeon, Brisbane Hospital
for Sick Children.

MRS. H., aged 60 years, was sent to me from an up-country town on the evening of August 16th, 1898. She gave the following history: Prior to May, 1898, she suffered for some months from occasional attacks of pain, with obscurement of vision. Since May sight had been as bad as now, viz., barely light from darkness, and pain has been excruciating. Pain has been controlled latterly by $\frac{1}{2}$ gr. of morphia, hypodermically, daily.

Examination.—Patient looks very weak and ill. Both eyes deeply injected. Pupils dilated, and give a greenish reflex; quite insensitive to light. Both corneæ very hazy, and quite insensitive to touch. Anterior chambers shallow. Tension of each eye is quite N + 2. A red reflection obtained from each fundus, but corneæ and media too hazy to admit of any details being seen. There seems little to choose between the two eyes, but the left started first by patient's account.

A diagnosis of glaucoma was made, and immediate operation advised. Very little hope of improved eyesight was held out on account of the duration of the condition; but the likelihood of relieving pain seemed sufficient alone to justify operation, and the possibility of some improvement in sight strengthened this.

Under chloroform, following an injection of morphia, an iridectomy was performed on each eye in the early morning of August 17th. There was no pain subsequently. On the third day she counted my fingers at a yard. Her sight steadily improved until her corrected vision was R.E. $\frac{1}{2}$ partly. This vision was practically maintained up to August, 1900, when I saw her last, and I believe still is.

The vision in left declined and the eye sees, now, little but light from darkness. Its greatest improvement was fingers at 3 yds., in the temporal field.

Part of the cicatrix in the right eye became cystoid.

Her correction for right eye was + 3 D cyl. axis horizontal. The left eye could not be so accurately estimated on account of its very defective sight, but I gave it a + glass. Her temporal field in the right eye was good, but the nasal upper and lower fields very contracted. Tension in both eyes has been normal since operation.

Mrs. E., aged 49 years, was sent to me from an up-country town on February 19th of this year.

History.—Has been subject to severe headaches for many years. Eyes have been troubling for five or six months. The trouble began with a headache across the forehead and all round the face. Sight, she says, got a little bad. The pain went and came. It was mostly round the eyes at first, but for the last two months there has been shooting pain in the eyes, and the sight has been getting more affected, but it still varies somewhat. Used to see halos around the light before her eye got troublesome. For the first six weeks the pain kept her awake, but latterly she has slept well. Ezerine used by her medical adviser, who diagnosed glaucoma failed to relieve, and he advised her to consult me with reference to operative interference.

Examination.—Eyes not injected; pupils fully dilated; anterior chambers shallow; corneæ hazy, but sensitive to touch. Tension N + 1 to + 2 in each. Vision: Right eye; fails to count fingers, but sees shadows in a small part of its temporal field; left eye counts fingers at 1 to 2 ft. if held in temporal field, can trace light imperfectly in nasal field; cornea too hazy to admit of any clear view of the fundus of either.

The patient was not highly intelligent, and she seemed dazed by the loss of sight and feeling of tension in her eyes. Glaucoma was diagnosed. Immediate operation was advised. Prognosis was guarded to unfavourable, though she was told that there was a possibility of improvement. The same afternoon, under chloroform, an iridectomy was performed on each eye. She was very hysterical for 36 hours afterwards, screaming and crying at short intervals. Sight steadily but slowly improved, until on March 9th her corrected vision was: Right eye, fingers in temporal field; Left eye, $\frac{1}{2}$; field of left eye very contracted, being 10 to 15 deg. in temporal, and little more than 5 deg. in the other fields. Her eyes were

comfortable, and there was some hope of vision being maintained. It was so until the end of the month. Tension of each was normal. Her nervousness had decreased, and she was looking very well. I have not heard of her since March. She required for correction + 6D cylindrical axis horizontal for each eye. Some of the astigmatism in each of these cases was doubtless due to the operation, but the whole of it could not have been. Probably the greater part of it had no connection with the operation.

These two cases are instructive, not only because they are an encouragement to us to perform iridectomy even in apparently hopeless cases of glaucoma of some standing, but they also suggest that hypermetropic astigmatism was at least an exciting cause in each case. The severe headaches or "neuralgia" from which the second case had suffered for years would doubtless have been relieved by correcting glasses, and the suggestion is that the correction of her hypermetropic astigmatism for constant wear might have prevented the development of glaucoma. The first case also had hypermetropic astigmatism, but I did not note a history of head pain in her, though it may have been present.

In primary glaucoma the filtration angle is almost always closed, *i.e.*, the angle between the base of the iris and the corneo-scleral junction. Compression or obliteration of the filtration angle is assumed to be the cause of glaucoma, *i.e.*, "the condition is essentially one of retention."

It is stated and admitted that a majority of eyes that suffer from glaucoma are hypermetropic. My own experience of glaucoma more than confirms this. In the words of Priestly Smith, "The hypermetropic eye has as a rule a more prominent ciliary body and perhaps a shallower anterior chamber than the emmetropic or the myopic eye, and these conditions would tend to facilitate compression of the filtration angle. Moreover, an excessive accommodative effort tends to slacken the zonula unduly, and thus facilitate forward displacement of the lens."

To amplify this statement we have to remember that the ciliary muscle in hypermetropes is hypertrophied by constant use; that its larger bulk diminishes the distance between the ciliary processes and the lens margin, and consequently diminishes the space through which the lymph from the posterior chamber passes forwards to reach the anterior chamber by passing between the lens and the iris. The tension, therefore, of the lymph in the posterior chamber will be apt to be consequently increased. It will therefore exert a pressure

upon the ciliary processes and base of the iris calculated to narrow the filtration angle between the base of the iris and the corneo-scleral junction. In addition to this the space between the ciliary processes and lens margin is apt to be narrowed by the actual pulling inwards of the corneo-scleral junction by the constant traction of the ever active ciliary muscle. And further, the constant state of accommodative spasm means the constant increased curvature of the anterior surface of the lens, which, by pushing the iris forward again, tends to narrow the filtration angle, and consequently to make more difficult the filtration of lymph from the anterior chamber into the canal of schlemm and anterior ciliary veins.

Added to all this we have the constant state of unrest of the ciliary processes on account of the constantly contracting ciliary muscle underlying them. It is not too much to suppose that on this account the ciliary processes would be apt to secrete an increased quantity of lymph, and that the need for a free channel for the circulation and excretion of this lymph would be thereby increased.

Further, at the time of life glaucoma is most apt to occur, presbiopia has generally set in, and the lens is relatively larger and harder than at earlier periods. The already reduced space for the circulation of the intraocular fluids is thus still further encroached upon.

An argument that the presbiopic state would diminish the dangers due to accommodative strain would not be quite sound, for although the power of accommodation is then lessened or abolished, it is so on account of changes in the lens, and there is nothing to prove that the ciliary muscle does not still make an attempt to increase the curvature of the anterior surface of the lens.

(Read before the Queensland Branch British Medical Association.)

TWO CASES OF HUNTINGDON'S CHOREA—WITH A FAMILY HISTORY.

By C. A. Hogg, M.B., Hospital for Insane, Parramatta, N.S.W.

Two brothers, aged 38 and 40, were admitted to hospital in June, 1902.

Duration of Illness.—Wife states F— 10 years, wife states J— 10 years.

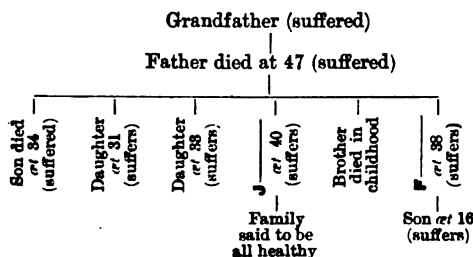
Family History.—Grandfather, father, and brother died of similar affection. One brother died young and suffered from fits. Two sisters are said to be affected in the same way as F— and J— and are living. The eldest son of F— suffers from a similar complaint.

Mode of Onset.—The father's first symptoms are stated by his wife to have been "a slight twitching and nervousness in the limbs." J—'s wife states that he began with "a slight throwing about of the head and hands, with irregular steps in walking; his speech became affected three years ago." F—'s wife states that his trouble began with movements of the face and head and difficulty in walking, and that his speech became affected five years ago. The two sisters started with movements in the head. F—'s eldest boy is troubled with twitching of the forehead and, occasionally, jerky movements of the back muscles. His speech is jerky and rapid, and his mother states it seems to be a trouble to him to walk. He also likes playing with children very much younger than himself.

Age of Onset.—Father, 38; sisters, at about 26; F—, 29; J—, 26; F—'s son, 16; brother (dead), 25.

Sex.—Both sexes seem to be affected.

FAMILY TABLE.



The following is a table contrasting the symptoms of the two cases:—

F. *et.* 38.

Attitude on standing.

He stands with his feet wide apart, and with his body bent forward at an angle with his legs.

He tends to sway backwards and forwards on his heels. At times he sways too far backwards on to his heels, and then there is a great tendency to fall backwards.

His arms and legs undergo irregular spasmodic movements, sometimes of individual muscles, sometimes a jerky spasmodic movement of limb as a whole.

J. *et.* 40.

Attitude on standing.

The same.

He shows the same swaying movements, and has frequently fallen, as shown by the many scars on the back of his head.

His arms are flexed at the elbows and adducted to the side. The same irregular spasmodic movements take place in his case. There are irregular choreic-like movements of some of the fingers.

His head is continually undergoing irregular movements of circumduction. His chin drops below the horizontal line, and then rotates through a quarter of a circle until his face looks to one side and above the horizontal. It then undergoes similar movements to the other side.

When lying down.

The same movements continue, but they can be checked for a time by the will or by some voluntary act. Rest appears to have little influence on them, although they cease to a great extent during sleep.

Spasmodic contractions take place in the facial muscles, and the forehead is wrinkled up from time to time. The fingers and thumbs undergo choreic movements. The big toe undergoes from time to time movements of extension, and the small toes movements of flexion.

His thighs and legs are kept extended and rigid, and from time to time irregular, spasmodic movements take place in the muscles. The muscles of the back undergo the same spasmodic contractions. His shoulders are from time to time elevated and depressed.

Gait.

On walking he walks with his legs extended and wide apart. The legs when raised and passed forward undergo a series of choreic spasms. He can walk in a fairly straight line, although there is a certain amount of staggering in walking.

In progression he sometimes drags his toes along the ground, sometimes he does not. Sometimes he raises his foot by flexing it at the knee. Sometimes he carries his limb forwards rigidly extended.

Speech.

His words are jerked out with a distinct interval between the words, and with emphasis more on the last word in a sentence—thus: "I—want—to—go—home"; The "home" being emphasised.

His head undergoes similar movements, but in his case the head is generally retracted, and the chin elevated when the movements are going on.

When lying down.

Similar movements under similar influences as regards rest, sleep, etc.

In addition he purses up his mouth from time to time in a peculiar way. The fingers and thumbs undergo choreic movements. The small toes undergo movements of flexion.

His legs are kept rigidly extended, and undergo slight spasmodic movements of eversion and inversion.

Gait.

Similar.

Similar spasms present.

He always raises his leg by flexion at the knee and brings it down toes first.

His gait is somewhat festinant in character.

Speech.

Similar. Sometimes the words themselves are slurred and indistinctly pronounced.

He is in the habit of emitting a peculiar expiratory, inarticulate, explosive grunt from time to time.	Similar. He also makes peculiar smacking noises with his lips from time to time.	Both biceps jerks exaggerated.	The same present.
Mechanical irritability of muscles increased. Myoedema present.	The same present.	Both triceps jerks exaggerated.	Triceps jerks exaggerated.
Leg and arm muscles in state of rigidity.	The same.	Tapping on lower end of radius and ulna cause active biceps and triceps reaction.	The same.
The muscular power of both legs is fair, and there is no difference between the two sides.	The muscular power of right leg is weaker than left.	There is no jaw jerk.	No jaw jerk.
The grasp of right hand is diminished, that of left more so.	The grasp of both hands is weak.	Superficial reflexes present.	The same.
He cannot protrude his tongue at all, and there is difficulty in swallowing.	The same is present. When asked to do so, purses up his lips.	No headache.	Is always complaining of headache, and asking for something to relieve it.
Writing tremulous, and almost illegible.	Can't write at all now.	His mental condition is that of dementia. His memory for time, such as telling the day, month, year, etc., is poor. Realises his condition, and wants to be cured. He is good-tempered and far more tractable and amenable than his brother. His intelligence and memory are also much better, and he is not so irritable.	He is in a state of slight dementia. He is emotional, tends to burst into tears, and threatens to cut his throat if the pain is not relieved. Realises his condition, and wants to be cured. He suffers a good deal from the symptoms of cerebral irritation. When in bed he will lie curled up on his side, resenting any movement or any questions which are asked him or any noise. When curled up in this way the movements are not nearly so well marked as when he is lying on his back; in fact, he is almost at rest.
There is tendency to fall on standing with feet together and eyes shut, also on turning.	The same.	His facial expression is vacant, and wanting in intelligence. His mouth is generally gaping.	Facial expression is vacant. His mouth does not gape like his brother.
There is inco-ordination of both arms and legs.	The same.	Sensation to touch appears normal.	Appears normal.
Electrical reactions show simple quantitative diminution, and there is no reaction of degeneration.	The same.	Sensation to heat and cold.—This varies; he always seems to recognise the heat, but makes his mistakes always in the direction of calling cold hot.	Sensation to heat and cold.—He always recognises the heat, and draws his limb away, saying we are burning him. He—as in his brother's case—makes his mistakes in the direction of calling cold hot; but that he does recognise sensations of cold I think we can safely infer from the fact that he always complains of cold at night and asks for more blankets, and is always wanting to get near the fire. To show what an impression the feeling of heat makes on his demented mind, when pricked with a pin after testing him for temperature he calls out "hot," but localises the spot fairly accurately.
The muscles all feel firm, and there is no sign of any atrophy.	The same.	Pain.—He recognises the prick of a pin; draws his limb away, and locates the spot fairly accurately.	
<i>Reflexes.</i>	<i>Reflexes.</i>	In estimating the value of these subjective symptoms allowance must be made for the mental condition of the patient, which is that of slight dementia.	
Light reaction present.	Light reaction in right, sluggish in left.		
Consensual reaction present. Most active in right eye.	Consensual reaction; sluggish in left, but active in right.		
Accommodative reaction present.	Accommodative reaction doubtful.		
Skin reflex absent.	Skin reflex absent.		
	Left pupil larger than right.		
Both knee jerks exaggerated.	Knee jerks very active.		
No ankle or rectus klonus.	Slight right ankle klonus.		
Babinski present on both sides.	No rectus klonus.		
No front tap contraction.	Do.		
No paradoxical contraction	Do.		

Sense of position—Normal. In estimating weights he is generally fairly correct if tested one hand at a time, but if tested with the two hands he always says the object in the left hand is the heaviest. (The left hand is the weakest.)

Special sense.

Ophthalmoscope. Both the discs are deeply cupped (physiological), and the nasal side of disc shows parallax movement in both eyes, also the nasal half upper and lower borders of the disc. There is slight pallor of the temporal half of the disc in right eye.

Field of vision.—Rough test with the fingers. There is no contraction in field of vision.

Eye-Pupils.—The right is irregular and squared off across the top. The left is irregularly oval. There is no nystagmus.

Smell.—Normal (tobacco and onion test).

Taste.—Bitter, sweet, acid, normal.

Hearing.—Watch heard 1 ft. distance with both ears. Both the membranes are fairly healthy.

Sense of position—Normal. His estimation of weights was very inaccurate, but in his case the value of test was nil on account both of his demented condition and his extreme mental irritability.

Special sense.

Ophthalmoscope. There is no abnormality in the appearance of the optic discs, except that the temporal side may be just a shade more pink than usual.

The left pupil is larger than the right. There is no nystagmus.

Smell.—Tobacco he calls correctly. The smell of onion he calls tobacco.

Taste.—Not reliable.

Hearing of watch at about the same distance as in his brother's case. Both the membranes are healthy.

THE DIAGNOSIS.

From the mode of onset (to which the present state of the son of Frederick gives a clue, and also the history of the mode of onset in the others) it appears to be due to some lesion starting either in the cortical or subcortical regions, and perhaps also affecting the cerebellum or the cerebellar tracts. Owing to the mental condition of the patients, it is difficult to say if the posterior columns are affected. The diagnosis probably lies between—Huntingdon's chorea, Marie's cerebellar ataxy, ataxic paraplegia, disseminated sclerosis or general paralysis of the insane.

1. The tremor or choreiform movements are not increased, but are rather checked by any voluntary act, or by the will, and they do not cease when patient is at rest, and are sometimes seen even when the patient is apparently asleep. This is against disseminated sclerosis (also the

absence of nystagmus). Rarely also do we get such a uniform spastic affection of the four limbs in disseminated sclerosis, nor does the latter often exhibit such a marked family history.

2. General paralysis of the insane can be excluded by the long chronic history, by the family history, by the absence of any marked mental symptoms—indeed, the patients are very conscious of their distressing condition, and are only anxious for a cure—by the absence of any characteristic speech defect, and by the fairly early age of onset.

3. Ataxic paraplegia is rare, especially the hereditary form; it generally begins in, and, in the majority of cases, is limited to the legs. Head, neck, and speech as a rule are unaffected. Against it is the mode of onset and family history. The changed mental condition in these two cases is against ataxic paraplegia. There are no choreiform movements occurring while the patient is at rest in ataxic paraplegia.

4. Marie's Cerebellar Ataxy.—Against this is the absence of the reeling or cerebellar gait. The motor difficulty in Marie's is said to be entirely ataxic, and devoid of either spasticity or rigidity, although reflexes are exaggerated. Marie's is said also to affect chiefly the legs, and there is said to be no ataxia when patient is at rest.

5. Freidreich's ataxy can be easily excluded.

6. In some respects, more especially in regard to the gait with in one case its tendency at time to festination and retropulsion, these cases resemble paralysis agitans. Against paralysis agitans are—the family history, the early age of onset, the affection of the head, the difficulty in swallowing, and the increased reflexes. The site of onset also is against Parkinson's disease. The speech affection is not that of the latter disease.

The only conclusion I can come to is that these are cases of Huntingdon's family chorea. The primary changes are probably cortical or subcortical, and leading to secondary degeneration of the motor tracts. It is difficult to say in these cases whether the posterior tracts of the cord are affected owing to the unreliability of their replies due to their mental condition, or whether the inco-ordination is due to a degeneration of the cerebellum similar to that affecting the cerebrum.

Peterson (page 511) describes a case of Huntingdon's chorea in which there were cortical changes and sclerotic changes in the descending cord tracts, or in the antero-lateral and cerebellar tracts.

The points in favour of Huntington's chorea are:—

1. The family history.
2. The incurability.
3. The age of onset.
4. The mode and place of onset.
5. The choreiform movements influenced by will and sleep.

The habit spasms or tics generally come on between 5 and 15 years, and can, I think, be excluded.

TWO KIDNEY CASES.

By E. Ken Herring, M.R.C.S., L.R.C.P.,
Shepparton, Victoria.

Mrs. L. called me in on the evening of June 16th, 1901, and complained of great pain in her right side and vomiting. She was a thin worn-looking woman, aged 44, with a nasty hacking cough, flushed cheeks, temp. 102.4°F., pulse 120. A large tender tumour was readily found in the right abdomen, extending from the semilunar line backwards into the lumbar region, downwards to the iliac crest and upwards to the liver, there being a decided dip between it and the liver. The tumour felt solid, but was too tender to palpate properly. The tip of left kidney could be felt in its place and was judged to be enlarged.

Previous History.—Patient said she had had a floating kidney for nine years, following a confinement. At times she could grasp it in her hand. Painful attacks occurred from time to time, which had always been relieved by rest and fomentations. She had been advised several times to have an operation, but one doctor had told her the operation was not satisfactory. She had had pleurisy twice, years ago, and typhoid fever. Latterly had been in good health.

Family History.—One sister and one aunt died of pulmonary tuberculosis. Rest good.

Present attack attributed to stretching up at a window curtain; came on suddenly and was similar to previous ones, but this time would not be relieved by rest and fomentations, and was rapidly getting worse.

Course.—Opium and belladonna were given, and next morning a consultation was held with Dr. McKenna. The symptoms were then worse, and immediate operation was decided upon. The urine showed a lot of urates and a trace of albumen, otherwise normal.

Operation.—The diagnosis being hydronephrosis, with probably pus, to confirm this I first made a small exploratory incision over the

tumour. A fluctuating kidney tumour was readily made out. The patient was then turned on her side and a lumbar nephrotresis—as my friend and master, Henry Morris, calls it—performed. About a pint of putrid pus flowed out, and the cavity was explored digitally. An enlarged pelvis with much erosion of kidney substance was made out. The enlarged calices were all explored. No stone could be felt, nor the ureteral opening. A large drain was put in, the wound sewn up, and the patient put back to bed.

Progress.—She had taken the chloroform administered by Dr. McKenna kindly, and the stomach being kept empty had no sickness after the operation, and the state of affairs was soon much improved. The discharge from the tube was soon mostly urine, which, soaking the dressings, caused great skin irritation, so a long tube was put in leading to a vessel below the bed. Nine ounces were collected from the tube in the next 24 hours, while 28 ounces of clear urine were passed by the bladder. In a few days pus came through by the bladder, showing that the ureter was patent. So, after a while, when the urine from the tube became less foul, and clearer, many attempts during the next two months were made to force the discharge through the ureter. The drain tube was tied up for hours at a time, or it was taken out and the sinus allowed to close. But the attempts were ineffectual, for the blocking of tube or sinus always after a time caused pain, rise of temperature, and a recrudescence of symptoms. This was due apparently to the intermittent blocking of the ureter by plugs of sloughing tissue, for the quantity of urine coming from the tube after tying it was not at all regular. At one time, after 12 hours tying, only 1½ ounces came away; at other times, after 11 hours, 2½ ounces; after 8 hours, 2 ounces; after 24 hours, 5 ounces; and once, after 29 hours, 11 ounces. This showed that the ureter, though patent, was not open enough to carry the whole discharge. During this time the abscess cavity was syringed daily with antiseptic solutions. The urine was measured daily, and averaged 30 ounces by the bladder, and 5½ ounces by tube.

The urine from the bladder generally contained pus, but at times was quite clear, showing that the right ureter was not always open, and also that the left kidney was in good order and working well. The temperature, which fell to normal the day after the operation, ran a persistent evening rise to 99° F. The cough cleared up, and general improvement was made, so that in five weeks patient was able to get about a little and go out on to the verandah, tying up the tube for the time.

So the case ran on, not too pleasantly for patient or doctor. The inconvenience of the tube, the irritation of the sinus, the dragging weight in the kidney after standing, and the lack of improvement beyond a certain stage were all borne bravely and patiently for four months, when the patient began to press for further relief.

The question then arose, Is nephrectomy justifiable? Now the maximum secretion from the diseased kidney was 9 ounces—that is to say, the maximum amount discharged from the tube in 24 hours during which the urine from the bladder was free from pus. This amount, therefore, was taken as the ordinary maximum secretion of the right kidney, and showed that it might be removed without giving the other kidney much more work to do. But the temperature chart, the cough, the enlargement of the left kidney, the previous pleurisies, the family history, and the negation of other causes of the pyonephrosis all pointed to tuberculosis. Since the cough had cleared up, however, no sign of pulmonary tuberculosis could be found, and several examinations of the pus kindly made for me at different times by Dr. Cherry, of the Melbourne University, showed no tubercle bacilli; also, upon communicating with patient's former doctor—Dr. Small, of Geelong—who had known her and her family for years, he assured me that tuberculosis was very improbable. Seeing, therefore, that the right kidney was an almost useless offending organ, and after having thoroughly explained the risks to both patient and her husband, I agreed to a nephrectomy.

Operation.—Dr. McKenna again giving chloroform, I made a lumbar incision, cutting the previous scar diagonally at the sinus opening. A mass of dense adhesions led down to the kidney, and a long time was taken up in breaking down these and freeing the kidney, and there was considerable oozing of blood from the kidney surface before the renal vessels could be reached and tied. The peritoneum was easily detached from the kidney during the process. There was no appearance of a mesonephron, the kidney being simply bulged into the peritoneum, proving the history of "acquired flotation." Other vessels were felt and tied, and the kidney was then cut away from its pedicle. The ureter was then tied and cut and its stump cauterised. It would not pull out, so had to be cut close up to the kidney. After a look round to see that all was safe the wound was flushed out freely with hot sterilised water and stitched up, leaving a small drain in the vertebral end. The operation took an hour and twenty minutes; the patient was rather collapsed after

it, but as before she rallied well. The vomiting was slight, urine passed naturally in the evening, and all went well for four days. Then the temperature rose, and serious symptoms like peritonitis came on, and for ten days caused some anxiety. Some pus had formed and collected behind the healed wound. After this was let out patient did well. A sinus persisted, however, for a long time, from which at different times came ligatures and pieces of membrane like the end of a vein. But the patient was soon on her feet again and able to take charge of her household, which she had not been able to do since the former operation.

The excised kidney is shown fairly well in the two photos. No 1 is the anterior view,



FIG. I.

showing the dimensions and relative size of pelvis and kidney. A straw (A) is in the renal artery, above and below which are the veins. Another straw (U) is in the ureter, the calibre of which would only take the straw. S is at the sinus opening. No. 2 shows the kidney split open. The medulla has vanished, the cortex is in places narrowed down to a mere line, and it is seen that the whole interior of the kidney is a large abscess cavity, divided up by several thick fibrous brands; two are split open.

H. Morris figures several similar kidneys in his last work.

The second is a good contrasting case.

Mrs. R., *et.* 56, had a tumble off a verandah 18 inches high whilst nursing a baby. To save the child, she twisted herself so that she fell in a strained position. She felt bruised at the time over the right side of the back, and stayed in bed next day, but took no further notice of it. A week afterwards she complained of a severe pain over the back of the liver, and vomiting, for which she called me in.

History.—She said she had been "bilious" for years, with occasional vomiting, but had never had a serious illness nor required a doctor. Had influenza two years ago.



FIG. II.

On Examination.—Patient was a well-nourished lady of inactive appearance, with a sluggish-looking skin and a turbid conjunctiva. A small patch of crepitations could be heard at the painful spot between the lung and liver, but no outward and visible sign of injury, though the area was tender to pressure. The tongue was thickly coated. Pulse, 96; small, and soft, with some arrhythmia of the cardiac cycle and feeble heart sounds. Retching was frequent.

Course.—The crepitations cleared up under counter irritation, but pain and vomiting continued, with sleeplessness and great restlessness and pyrexia. Temperature to 102° F. The pain shifted to the shoulder, then down the right arm, then to the lower abdomen, where some hæmorrhagic spots appeared presently in the

skin. These soon developed into small abscesses. Then an abscess developed on the right vulva; then the right arm began to swell just above the elbow, and after a time an abscess was made out behind the brachialis anticus tendon; another came on the left vulva. As these came on, patient became a most difficult patient to treat: irritable, dissatisfied, suspicious, and frightened. It was with the greatest difficulty that I could persuade her to allow me to lance the various abscesses as they appeared. The one in the arm, which showed no signs of pointing anywhere, she would not let me touch till it gave her no rest, when I opened it under cocaine, and got quite a teacupful of pus from it.

Two consultations were held with Dr. Florance, but the cause of the pyæmia could not be defined. Things went on so with in and out progress for seven weeks, when patient had so irritated and worried both her nurse and her family that at her desire it was decided to send her to the Mooroopna Hospital. In a couple of weeks she came back—much to the relief of the hospital nurses—as irritable as ever, but with a fresh cause for it, for she now had a tender spot below the liver in front, just over the site of the gall-bladder. A tender tumour was felt here and was thought to be the gall-bladder. Up till now the diagnosis had been an injured liver with abscess formation and pyæmia. The puzzle had been to find the abscess. The gall-bladder was now pounced upon as the discovered culprit. Exploration was advised and refused at first, but after two more weeks when patient had become thoroughly exhausted by the pain and want of rest, she consented to be operated upon and gave herself up for dead. During this time the tumour had enlarged steadily downwards till it seemed to become quite detached from the liver, and felt now like an enlarged kidney floating in the iliac region. The urine, which had been examined two or three times, had been normal, so that an abscess in the kidney substance was diagnosed.

Operation.—Ether being given by Dr. Florance, a small abdominal incision was made over the tumour and a digital exploration made. An enlarged hard kidney with uncertain fluctuation was felt, the gall-bladder and liver being felt above and normal. The patient was then turned on her side and the lumbar incision made. Fluctuation was now easily made out, and a nephrotresis performed. About a half pint of thickish dirty pus came away. The abscess cavity was explored by the finger and proved to be the enlarged pelvis with apparently little erosion of the kidney substance. No stone felt. A large drain was put in and the wounds sewn up.

Progress.—Patient rallied from the operation well. The temperature was normal next day. Pus and thick *débris* oozed from the tube freely. The kidney was syringed out twice daily with Condy's solution. Pus and blood appeared in the urine from the bladder on the fourth day. Thenceforward improvement was rapid, and on the nineteenth day patient was able to be on her feet a little; the discharge had stopped from the wound, though there was still pus in the bladder urine. On the twenty-fourth day all was well, urine clear, wound healed, kidney easily palpated in its low position, but not tender, and patient happy and contented once more and able to enjoy life, and presently declaring herself in better health than she had been for years.

Comment.—These two cases are interesting and instructive in many ways. They show primarily how the success of a nephrotresis for pyonephrosis depends upon the patency of the ureter—an open, normal ureter leading to recovery of the kidney, a constricted ureter to the loss of the kidney. They show the ready liability of the kidney to pus formation after internal and external injuries; in the latter case the kidney being injured through an uninjured abdominal wall. Again, how a kidney may “float” safely for years and then be suddenly turned into an extremely dangerous rock. And how a kidney can be dragged out of its place by its own increasing size and weight, coupled with vomiting. And, finally, how one may be misled into a diagnosis of “liver troubles” or tuberculosis.

THE FACIAL NERVE IN RELATION TO THE RADICAL MASTOID OPERATION.

By H. Russell Nolan, M.B. (Syd.), Clinical Assistant to the Throat Department, Prince Alfred Hospital, Sydney.

The bony tissue immediately surrounding the facial nerve in its tortuous passage through the temporal bone is compacted to form a dense, hard-walled tube, the Aqueductus Fallopii, which sheathes the nerve from the internal auditory meatus within to the stylo-mastoid foramen without and below, where the nerve makes its exit from the temporal bone into the tissues of the neck.

This facial canal at first passes directly outward towards the inner wall of the middle ear.

(In Fig. D the cutting in the middle of the upper border of the specimen shows where the bone has been removed to expose this, the first part of the course of the nerve. See also in Fig. E.)

With this portion of the nerve the operation in question can have nothing to do. At this point, the internal wall of the tympanum, is situated the geniculate ganglion, and here the second part of the nerve commences.

(In Fig. D the swelling in the course of the nerve is the geniculate ganglion, the smaller nerve passing straight forward, on the right is the large superficial petrosal in its canal, and the larger one arching backwards to the left, the facial exposed in the aqueduct.)

Bending abruptly and at an acute angle, the canal goes backwards (Figs. D and E), downwards and outwards (Figs. B and C) in an oblique direction along the inner wall of the tympanum, having the foramen ovale just below (Figs. A, B, C, and D), while above and behind the canal at this point is seen (well marked in Fig. D) the ridge of dense bone, which is the external or horizontal semicircular canal.

The third portion of the canal commences at the level of the foramen ovale (and one-eighth of an inch behind it, MacEwan¹) where it bends downwards at an obtuse angle (Figs. C and D) and descends to the stylo-mastoid foramen. It is in these second and third parts of its course that the nerve is liable to injury during the radical mastoid operation.

The evil results which follow such an injury are well enough known and do not need to be recapitulated here. Nor should this paper be taken as an attempt to show how such an important operation should be performed, but only just what its title sets out.

It is as well to remember that the facial canal is a canal only in the anatomical sense. It is a tube and not an open channel or gutter as it appears in all the specimens, except E. But there often is, in newborn children, a defect of considerable size in the wall of the tube as it passes over the foramen ovale.

This fact explains, so MacEwan says, the greater frequency of facial paralyses in children following on suppurative median otitis.

Also, not uncommonly, the same authority says, in adult life there is an hiatus in this part of the aqueduct, probably due to developmental arrest. The rule remains, however, that the facial canal is an intact tube.

While the nerve of expression may suffer in doing the classical mastoid operation, which simply opens the mastoid antrum and leaves the middle ear untouched, it is in what is known as the radical procedure that such an accident is more likely to happen. In this latter—

1. The antrum is opened with the same guides and precautions as in the former, but in addition (to mention only those steps which may concern

the integrity of the facial nerve, and not necessarily in this order of performance),

2. The outer wall of the tympanic attic is removed, with any diseased ossicles remaining.
3. The postero-superior wall of the osseous meatus is taken away, being the bridge of bone which now separates the opened antrum behind from the tympano-attic cavity in front.
4. All overhanging ledges or rough edges of bone are smoothed down by some suitable implement, usually a burr; and
5. Any doubtful spot (patch of caries or bud of granulation tissue) is curetted, even the whole lining membrane of the tympanum (Lack²) freely but gently curetted.

1.—Opening up the Antrum.

Presuming the pericranium and soft parts have been elevated forwards until the posterior and superior margins of the osseous meatus come into view, then will be seen behind and above the junction of these margins the supra-meatal triangle of MacEwan. This is a depressed triangular-shaped area, the apex of which points forwards, bounded above by the horizontal continuation backwards of the posterior root of the zygoma, and below and in front by the posterior wall of the meatus, which part of the posterior wall often projects as a well-marked spine (the spine of Henle).

(In Fig. B this triangle has been bisected vertically, the posterior basal moiety only being seen on the specimen. See also in Fig. E, but not so well marked).

This triangular depression is of extreme importance—*firstly*, because a hole sunk in this triangle, going horizontally inwards and a little forwards, but keeping parallel in any case to the direction of the auditory canal, should (at a depth of not more than half an inch: Cheyne and Burghard) open into the antrum; and, *secondly*, because this landmark is so constantly present.

In 426 temporal bones, out of 450 examined for MacEwan, this triangle was definite, and of the remaining 24 it was recognisable in 22. If at a depth of half an inch the antrum is not opened (MacEwan), or in those cases of old-standing disease where the mastoid becomes very hard and sclerosed and the antral cavity extremely small (Lack), great care will need to be exercised to avoid the facial nerve. In these cases the cavity should be deepened only in its upper part, an assistant closely watching for twitching of the face.

(Compare Fig. C, which shows how by keeping to the upper part of the cavity one can penetrate much further in before meeting the facial.)

In connection with the rule to excavate in a direction parallel to the external meatus, Fig. D is very instructive. This is a specimen from a practical surgery class, in which the antral cavity has been completely missed and the sigmoid sinus behind it opened, largely in this case, because the operator could have paid no attention to keeping parallel to the external auditory canal.

2.—Removing the outer attic wall so that the roof of the meatus may be flush with the roof of the tympanum.

In this the danger should not be great, as the chisel or burr would have to slip across the full width of the tympanum to reach the nerve, a distance, according to Politzer³, at this point of 5 to 6 mm.

(In Fig. A, the nerve is seen on the inner tympanic wall just passing over the top of the foramen ovale, and would be better seen if the down-hanging edge of bone just above, which is the outer wall of the attic, had been cut away).

(In Fig. E, the outer attic wall is beautifully seen in transverse vertical section. Note that the whole width of the tympanum at this point intervenes between it and the second part of the nerve).

3.—Removal of the bridge of bone, which is the inner end of the posterior and what is left of the superior wall (roof) of the meatus.

(It has been chipped away in Fig. A to uncover to view the facial on the inner tympanic wall).

This bridge is arched from below, upward and forward. Its upper end is as distant from the facial on the inner tympanic wall as is the outer attic wall, *i.e.*, the whole width of the tympanum at this point lying between.

But the facial while passing backwards and downwards along the inner tympanic wall also has an outward trend (Figs. B, C, and E), and so gradually approaches to the lower part of this bridge, forming with it a curved-shaped V. Therefore, in removing this bridge of bone, when working at the upper end of it we are as far away as possible from the nerve, and get nearer to it the lower down the arch we go. A bent probe is recommended to be used to define the passage between the antrum and the tympanum and the bridge carefully burred or nipped away on this guide.

ILLUSTRATIONS TO THE FACIAL NERVE IN RELATION TO THE RADICAL MASTOID OPERATION

By H. RUSSELL NOLAN, M.B. (Syd.),

Clinical Assistant to the Throat Department, Prince Alfred Hospital.



FIGURE A.

External surface of portion of the right temporal bone, showing, from right to left, the glenoid fossa, bounded above by the zygomatic process (posterior root), the styloid process being well marked below.

The vertical plate of bone, which divides the glenoid cavity from the cavity just behind, is the anterior wall of the meatus.

The floor of the meatus is marked by a deep cutting made to expose the nerve from the floor of the tympanum to the stylo-mastoid foramen.

Above is seen the inner wall of the tympanum with the first part of the nerve just passing over the foramen ovale.

The large cavity, most posterior, shows on its inner wall the opened antrum (marked out in white paint), continuous, in front, with the tympanum.

Between these two cavities is seen the ridge of bone, the external semicircular canal.

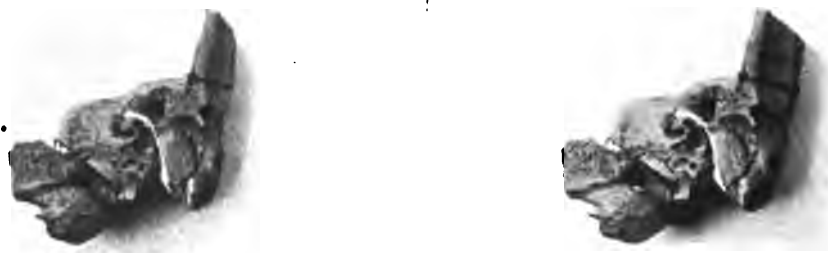


FIGURE B.

Vertical section through the long axis of the external auditory canal of the left temporal bone, showing, from right to left, the mastoid process; MacEwan's triangle; the posterior wall of the canal; the tympanum cavity, with opening into antrum above; the nerve exposed in its whole course, from the internal wall of the tympanum to the stylo-mastoid foramen, and the first and second turns of the cochlea (in section).



FIGURE C.

A section in a similar direction to Fig. B, but made further forward, which shows the floor of the meatus, and shows also the promontory uncut (the first turn of the cochlea). The excavation is such as might be made in this operation. The nerve is exposed in its canal. The ridge of the external semicircular canal is seen above, and external to it, between the operation cavity behind and the tympanum in front. The chorda tympani nerve is seen, cut short as a short white rod, emerging from the bone at the posterior part of the tympanum.



FIGURE D.

A vertical cut through the mastoid process and long axis of the right petrous temporal. From left to right—the mastoid process, with an excavation which opens on its inner wall into the sigmoid sinus. The antral cavity, an olivary shaped depression, continuous forward over a ridge of dense bone (the external semicircular canal) and the facial nerve, with the tympanum. The nerve exposed in its whole course. The inner tympanic wall with the promontory pointing backwards, having the foramen ovale above and the foramen rotundum below. A depression on the upper border for the Gasserian ganglion and the carotid canal in its whole length.



FIGURE E.

Vertical section of the left temporal bone, the cut passing through the long axis of the external meatus, across the tympanic cavity, and through the long axis of the internal auditory meatus. MacEwan's triangle is only faintly seen. The attic is well seen, extending outwards over the roof of the meatus. The stylo-mastoid foramen is cut obliquely. The first and second parts of the facial are shown in the opened canal, and the chorda tympani is seen coming forwards into the tympanum.

To pick up the position of the aqueduct when this intervening bridge is removed.

In the section on surgical anatomy in his classical work MacEwan gives very careful directions for locating it, the pyramid and fenestra ovalis being given as the guides, and when the pyramid is destroyed (by disease) speaks of the foramen rotundum as a fair indicator. These, while of use in anatomical specimens, must surely be valueless in this operation as guides owing to their smallness, the free oozing of blood (although adrenalin solution is said to overcome this difficulty) and the fact that in chronic suppuration of the middle ear the foramina, as pointed out by Politzer, are almost constantly more or less obliterated by the swollen and infiltrated mucous membrane. What, then, may be the practical guide to the nerve at this stage of the operation? In these specimens, at least, the ridge of bone which marks the floor of the entrance (aditus) to the antrum from the tympanum (being the external or horizontal semicircular canal) is a constant and easy guide to the canal of the facial for the greater part of its course in the tympanum. (In Fig. D the nerve is beautifully seen passing below and anterior to it. In Fig. A the nerve is seen just over the oval window and then disappearing at once under cover of the ridge.)

I can find no reference to this structure as a guide to the facial in any book or journal, so it may not be regarded in the operation as of value, or at least of that value which a study of dry preparations would lead one to think. It has, however, been pointed out to me during radical operations by Dr. St. Clair Thomson, of London (and was a very distinct landmark), and I believe that he thinks highly of it as a guide.

Another advantage of using the ridge as a guide is that this is a structure which, for its own sake, should be located that it may not be unknowingly injured. Injury of the semicircular canal would not be likely, with care, as it is composed of thick hard bone; but if it were, might result in disturbance of equilibrium and tinnitus, probable destruction of hearing power, and possible purulent inflammation of the labyrinth with meningitis (Hovel⁴).

4.—Removing Projecting Edges of Bone.

The one remaining "natural" edge is the junction of the floor of the meatus with the tympanum. (See Fig. B, the inner end of the floor of the meatus is at a higher level than the floor of the tympanum; also Fig. D). The meatal floor is made flush with the tympanic floor, care being taken when working towards the posterior part of the tympanum.

5.—Curetting Doubtful Spots.

In the region of the facial any granulation tissue is recommended to be first touched with a probe to make sure such does not surround the nerve. There are two crannies or recesses of the tympanum which should be curetted with great care. Both are in close relation to the nerve at its lower and outer part. The sinus tympani (Quain⁵) is where the floor of the tympanum at its posterior end is continued into a recess in front of and below the aqueduct (see Figs. B, C, and D). Hovell says the patient's eye should be carefully watched when curetting here, as the wall of the canal is not infrequently destroyed by disease at this spot. The other recess is the posterior sinus (Quain⁶). (The only specimens in which it is indicated, and that not clearly, are Figs. B and E.) This is also very close to the lower end of the nerve as it sinks through the tympanic floor at its posterior end.

I believe that the importance of this posterior sinus has been specially pointed out by Ballance, but I am unable to give the reference.

It is intended that the stereoscopic plates should be detached and placed in the rack of an ordinary stereoscope, when the relationship of the various structures will be more clearly seen and appreciated than if the usual woodcuts had been employed to illustrate the paper.

REFERENCES.

1. McEwan, "Pyogenic Diseases of the Brain and Spinal Cord."
2. "Manual of Surgical Treatment." Part V. Cheyne and Burghard.
3. Politzer, "The Human Ear."
4. Hovell, "Diseases of the Ear and Naso-pharynx."
5. "Quain's Anatomy." Vol. III., Part III., Fig. 93b.
6. Ibid.

A CASE OF TRAUMATIC EPILEPSY— OPERATION—RECOVERY.

By Gerald Weigall, M.B., Hon. Clinical Assistant
to Children's Hospital, Melbourne.

THE deceptive results obtained by a too early report of so-called successful cases of trephining for traumatic epilepsy is the reason for my delay in exhibiting the specimen I have here to-night and reading these notes of the case.

Miss C, *ast.* 24, school teacher, sent for me on January 26th, 1899, for advice with reference to an attack (believed to be one of sunstroke) which followed a game of croquet played in the sun. The attack was one of convulsions and loss of consciousness, followed by weakness and a desire for sleep. This attack was similar to one 12 days previously, brought on similarly by exposure to sun. Previous to that she had excellent health.

Family History.—One blood relation, father's brother, in an asylum; a maternal aunt with phthisis; otherwise good; both parents alive and well; no brothers or sisters dead.

Past History.—Never required a doctor prior to this attack, and enjoyed the best of health. As a child of 16 months she fell down a tank in course of construction, about 10 feet deep, striking her head on some loose bricks. The injury was not considered serious, as there "was not much bleeding," and a piece of sticking-plaster was applied by a neighbour. She was stunned at the time, and was "pretty bad during the night."

She soon improved, and the matter passed so completely out of the memory of the parents that for some time no cross-questioning of mine could elicit any history of a former injury.

The child was intelligent at school, was not subject to headaches, and showed no symptoms of cerebral irritation. As she got older she was conscious of a dint in her head and often spoke to her parents about it to ask how it was caused, but prior to this incident they always attributed her sensations to imagination.

Examination.—With care I detected beneath a mass of hair a minute scar about half-an-inch long and one line broad. This was not tender and was movable on the skull. It was 3-inch above and 2-inch behind the left ext. auditory meatus. No other pathological or abnormal condition could be discovered in any part of the body.

The progress of the case was rapid. The attacks became more and more frequent, till in October of 1899, nine months after the first attack, they came at intervals of 14 days and less; the prostration following one attack was barely over before another followed. This in spite of large doses of bromides, rest and cessation of all teaching and other mental worries. By this time the attacks had a regular typical course, viz. :—

Description of Attack.—The chief aura was one of sight—seeing flames and vanishing of objects on the right side. There was also a motor aura in the right face and arm and leg. The patient knew that when she felt "live blood" in the face that she must get help and lie down. Then followed loss of consciousness and violent contraction of muscles on the right side of the face, arm, and leg, with occasional movements of the other side during the intensity of the spasm.

She never bit her tongue, but she broke one of the molars on the right side from the grinding of her teeth. Her face became blue and engorged, and her eyes turned up. Never passed urine or defecated during an attack. She hurt herself on only one occasion, when

she fell out of bed during a night attack. The usual time for the attack was the early morning, before or after getting out of bed.

The question of operation, which I had steadily advocated, was at last forced upon the parents, and at a consultation with Mr. O'Hara decided upon.

Operation, October, 1899 —After shaving the head, the scar being then clearly visible, Mr. O'Hara reflected a semilunar flap, and exposed the bone under the scar, when a distinct hole, which the specimen before you demonstrates, became visible, leading through the bone into the cranium. Taking this as a centre, the first trephine hole removed a large piece of thickened and depressed bone, but an exploration with the finger showed that the injury to the inner table extended further than we had reached, and three other trephining were necessary to remove the large amount of damaged bone which can now be seen in the specimen before you to have been projecting into, and adherent to the dura mater for a distance which you can estimate for yourselves, but I should say half to three-quarters of an inch. The dura mater was slightly torn during the separation of some of the most projecting portions, and was sutured with fine silk. No bone or plate was used, and the wound was closed without drainage. Healing was rapid and perfect, and on the seventh day after the operation there was a typical, though not severe, convulsion, with rise of temperature to 100° F.

From then till December 17th, two months, she was perfectly free from any sign of attack, and on the date mentioned she had an aura, and thought an attack was coming on, but it did not.

From that day till June 10th of this year she never had another attack. She resumed her scholastic duties, and never seemed any the worse for the loss of the large amount of skull which you will see was removed. She had the misfortune to be thrown off her bicycle on to her head, raising a bruise over the site of the operation, but beyond a concussion she suffered no other harm.

The sequel to the case is unfortunate in the extreme, and robs it of much of its personal, if not scientific, interest. She contracted a broncho-pneumonia, following influenza, some six months ago. It rapidly developed into an acute tuberculosis, and she died in the early days of this month; so what would have been the ultimate history of the epilepsy must always remain a matter of conjecture.

The extraordinary feature of the case, to my mind, is not that she should get epilepsy with such an injury or that she should improve when operated on, but that for 22 years after the

injury, such damage as the specimen shows now to have been then sustained, should have failed to cause any symptoms during that time.

(Read before the Victorian Branch British Medical Association.)

A CASE OF SUDDEN DEATH SHORTLY AFTER CHILDBIRTH.

By C. H. SOUTER, M.B. (Aberdeen), Balaklava, S.A.

I WAS called by telephone at 10 a.m. on the 3rd of May, 1902, to see A.M., living about 12 miles away. The message merely stated that the patient had been confined about three hours previously and was then fairly well, but that the placenta had not been expelled, and that the nurse was anxious. I could get no further information. I arrived at the patient's residence at about 11.30. Upon further inquiries I made out that the patient was a primipara, aged 27, in good health, and at the full term of gestation. Pains had commenced 48 hours previously, continued for 12 hours, and then ceased, coming on again some hours later. The labour had been normal so far as the unskilled attendant could tell, and she stated that no more than ordinary hæmorrhage had taken place; it had ceased before my arrival. The patient was somewhat restless, very pale, lying on the back with the head propped up. I could not feel any radial pulse. The fingernails were pale blue and the lips also bluish in colour. The pupils were normal, and she said she had no tinnitus, "swimming in the head," nor faintness. Nevertheless the respirations were sighing and about 30 per minute. The heart sounds were feeble and 120 per minute, but no bruit could be heard. No apex beat could be seen or felt. The extremities were cold. No firm contraction of the uterus could be made out from outside, but the patient complained of severe pain in the back. Moderate pressure on the abdomen in such a manner as to grasp the fundus uteri caused the extrusion of some black loose clots and some very dark fluid blood, but not any advance of the cord. Firm pressure had no further effect, nor could I make out any contractions of the womb. There was no appearance to indicate that the hæmorrhage had been other than moderate before my arrival. I examined per vaginam. The placenta was still in the uterus. The os uteri clasped the cord loosely, and two fingers easily traced the latter up to the edge of the placenta. Gentle traction on the cord caused no sensation as of advance when combined with external firm grasping.

Several attempts to express the placenta from the uterus failed. I then introduced my thumb

and two fingers inside the os, and made steady traction on the placenta, continuing outward pressure. The placenta came slowly away, and was delivered. I found it to be intact, and compressed into the shape of a "French" loaf, the membranes also being complete. No bright blood followed, but what little came away was fluid and very dark, almost black. My left hand now failed to make out the uterus at all, and gentle downward pressure caused no responsive contractions; I therefore gave 40 minims of liquid extract of ergot by the mouth. The patient's condition was unchanged, the whole of this proceeding having taken about four minutes. There was a moderate-sized tear in the perinæum, which I brought together with two silkworm gut sutures. I then washed out the vagina (not the uterus) with a pint of hot biniodide of mercury solution (1 in 4,000), followed by a similar quantity of hot sterilized water. Except while stitching and douching (occupying about five minutes) I kept my hand on the abdomen, attempting to grasp the fundus uteri. In a few minutes I made out the latter, which commenced to contract in the normal manner. I had meantime dressed the perinæum, and now applied a binder, preventing as much as possible any movements on the patient's part. She was very restless, however, and complained more than ever of pain in the back. The respirations became more rapid and gasping, and the expression more anxious. I could still feel no radial pulse. I gave her two drachms of brandy in a little water, had hot applications made to the feet and legs, withdrew the pillow from under the head, and gave four minims of liquor strychniæ by the mouth. I had no digitalis with me, nor any suitable needle for making an intravenous or hypodermic transfusion of saline solution, but I made preparations for giving a copious hot rectal injection of the same. I informed the husband that I was much alarmed by the patient's condition, and made inquiries about her previous history, but could get no information, except that they "did not think" she had ever had rheumatism or scarlet fever, and that she had not been subject to fainting or other signs of heart trouble. I gave another two drachms of brandy in water, and continued the hot applications to the lower limbs. I was about to administer the enema of hot salt solution when the breathing became interrupted, and the patient ceased to toss the arms about. I called in her husband, but she was unable to speak to him before she expired. I was only by the bedside for something over half-an-hour, and lost no time in doing what I have described above. Perhaps more might have been done had the means been at hand.

I have ventured to record this case somewhat at length, because instances of sudden death in the puerperium, or immediately after labour, are fortunately not every-day occurrences, and the precise cause in many cases is not self-evident. Thrombosis of the pulmonary artery, air embolism, internal (or other) hæmorrhage, heart failure (syncope), cerebral hæmorrhage, and shock after difficult labour, are the chief causes.

In the case I have related I consider I had to deal with gradual (one might call it progressive) failure of the heart. There was no evidence of serious hæmorrhage either before or after my arrival. The blood that escaped while I was there was of a venous character. There was no unconsciousness till the last few minutes. There was no rupture of the uterus. The finger-nails and lips were not blanched, but bluish in colour from an early period, for the attendants said they had noticed this ever since the child was born. No "inward examination" by the nurse was confessed to; I asked the patient, and she said none was made. All the symptoms were marked before I made a vaginal examination or gave a douche, hence air embolism may be excluded. Nothing suggested cerebral apoplexy. The difficulties of the labour were not apparently of a kind to cause shock. The child was alive and well.

The literature to which I have access says comparatively little about sudden death after labour. Herman, in "Difficult Labour," p. 308, says: "When a patient is very prostrate the effect of suddenly emptying the uterus . . . may cause fatal syncope." But here he is referring to "placenta prævia" with loss of much blood. He adds that a patient in whom loss of blood has been stopped may "pass gradually into collapse and die." Leishman (in the 1888 edition, p. 334) says thrombosis and embolism are predisposed to by exhausting hæmorrhage, but he mentions no cases of sudden death within a few hours of delivery from these causes. Goltman (*Medical Record*, May 8, 1897) remarks on a case of thrombosis secondary to varix which caused sudden death during the puerperium, and says that pulmonary embolism is the cause of most such cases, but adds that prolonged labour or shock may directly cause sudden death (Braithwaite's *Retrospect*, Vol. CXV.). The most full and interesting account of the subject within my reach I found in "Churchill's Theory and Practice of Midwifery," though the edition is very old (1872), and, significantly enough, the pages in that portion of the book were uncut. In chapter 22 he deals with sudden death, and details a number of cases. Amongst them is (p. 630) one described by

M. Chevallier thus:—"After the birth of the second child (twins) she appeared a good deal exhausted, and as the discharge of blood was very moderate the accoucheur thought it best to defer the extraction of the placenta. She recovered a little, but about two hours afterwards grew suddenly faint, breathed short, and died in about half an hour." On page 631 is also a quotation from Ramsbotham's "Practical Observations," which describes such cases under the heading of "Idiopathic Syncope," and a similar quotation from Christison on page 630. Either of these would serve to describe the case of A.M. almost precisely, and they appear to refer to a class of cases in which death is due to heart failure of more or less sudden occurrence, unassociated with thrombosis, embolism, hæmorrhage, or entrance of air into a vein, and in the absence of organic heart disease.

UNUSUAL TYPE AND LOCATION OF LUPUS ERYTHEMATOSIS.

By W. McMurray, M.D., Physician to the Department for Diseases of the Skin, Sydney Hospital.

IN New South Wales lupus erythematosus is much more common than lupus vulgaris. In 1,000 consecutive cases in private practice the proportion was 13 to 4. It is rare to see it occur on mucous membranes. This is the reason of publishing the following case:—

S.P., aged 21, farmer.

Family History.—Father, 62, suffers from rheumatism; mother, 63; five brothers, five sisters—all living, in good health. There is no history of phthisis.

Personal History.—At age of 10 suffered from sunstroke; was ill a fortnight. For some time afterwards was subject to headache and vomiting. In cold weather suffers from chilblains. With these exceptions he has always had good health.

History of Present Condition.—Six years ago the lower lip became swollen, painful, and cracked, "just like a cold." This seemed to get better for a time, and then relapsed. Three months afterwards the upper lip became similarly affected. A mucoid secretion forms during sleep, which causes glueing of both lips and great discomfort. When the lips become stretched, as in laughing, they crack, and blood crusts form over the fissures. They are constantly scaling. It is just as active in summer as during the cold season. The lesions on the left side of the nose and lobules of the ear appeared three years subsequently.

*SUPPLEMENT TO THE AUSTRALASIAN MEDICAL GAZETTE,
AUGUST 30, 1903.*



W. E. Smith Ltd., Bridge Street, Sydney.

TO ILLUSTRATE DR. W. McMURRAY'S PAPER. (PAGE 412)

Present Condition.—He is well built, of a clear complexion, lymphatic temperament, teeth normal, enjoys excellent health. During summer the hands and feet are habitually red, cold, and moist; in winter he has suffered from broken chilblains; there is seborrhoea of the scalp and face; both lips are of a violet red colour, swollen, and everted. The surface is not ulcerated, but exfoliates thin lamellar scales. Here and there it is fissured, covered with crusts; these when forcibly detached have small, bleeding points. At the junction of the skin and mucous membrane on the upper lip a fine line of scar tissue is seen. On everting both lips a highly vascular line marks the junction with normal mucous membrane. On the left side of the nose, near the inner canthus and lobules of the ears, are well marked examples of the sebaceous type of this disease.

The only literature at my disposal bearing on the case is mentioned by Stelwagon* in a paper on "Persistent Exfoliation of the Lips," in which he reports Hassler's case of a middle-aged adult, who, in addition to well-marked areas of Lupus Erythematosus on the face, presented the disease upon the lips, extending to the mucous membrane, the lips being violaceous-red in colour, with lamellar exfoliation.

* Read at the twenty-fourth annual meeting of the American Dermatological Association at Washington, May 3rd, 1900.—*Journal of Cutan. and Gen. Urin. Dis.*, June, 1900.

CLINICAL AND PATHOLOGICAL NOTES.

METHYLENE BLUE IN SCIATICA.

In the issue of the *Australasian Medical Gazette* for June last appeared an interesting note by Dr. Zwar, of Clermont, on the treatment of supraorbital neuralgia by injections of methylene blue. Just after this appeared, a tramp came under my care in the Berrima District Hospital suffering from sciatica. He had suffered from it for two years, but it had become much worse lately, and he said it gave him great pain to walk at all. Seeing that the thigh on the affected side had atrophied to the extent of an inch in circumference, I see no reason to doubt his statement; the nerve could be easily felt and was thickened and tender. A week's rest in bed with administration of iodides and alkalies produced some benefit, but not much, and the case seemed a good one for testing a remedy. I attempted to inject 15 drops of saturated alcoholic solution of methylene blue into the nerve at a point between the ischial tuberosity and the great trochanter, but

the attempt was a failure. Two days afterwards I made a second attempt below the border of the gluteus maximus—the nerve was felt, and steadied with the fingers of the left hand, and the needle could be felt to penetrate the tissue of the nerve. 15 minims of the solution were injected. From that moment the sciatica ceased absolutely, and a week afterwards the man walked out of the hospital declaring himself quite free from pain. Should I meet with another case I should like to try the effect of injecting alcohol alone into the nerve, as the somewhat remarkable result might possibly be due to the alcohol rather than the methylene blue. As far as I know this is the first time the above treatment has been tried in sciatica.

ARTHUR S. VALLACK, M.B. et Ch.M. (Sydney),
L.M. (Rotunda).

Bowral.

GLIOMA OF THE RETINA.

HAVING read in the May number of the *Gazette* the interesting paper of Dr. Earle Newton on "Glioma of the Retina," it occurs to me to be opportune to place on record another "remarkable family history" to still further emphasise, if necessary, the hereditary character of glioma. Six years ago Mrs. H. consulted me at the Sydney Hospital about her second child James, who was then 18 months old. He had glioma in the right eye, which I enucleated. A few weeks later the left eye became affected in the same way, and I enucleated it also. From her next child, Marion, I removed both eyes for glioma when she was two years of age. She had been under observation for some months before the operation, the mother declining to have anything done, saying she would rather the child die than be like her blind boy with both eyes removed. However, when the gliomatous growths had increased, and the child began to suffer severe pain, she consented, and I enucleated both eyes the same afternoon. A few months later glioma appeared in her fourth child's left eye, and I enucleated it. Thus out of a family of four children three suffered from glioma of the retina, and in two of them both eyes were affected. I have recently seen these children, and they are all in excellent health. The eyes were examined at the Pathological department of the Sydney Hospital, and pronounced to be true glioma. Brief summary:—

1. John H., present age 8 years; not affected.
2. James H., present age 7 years; one eye removed when 18 months old, and the other when 2 years of age.

3. Marion H., present age 5 years; both eyes removed when 2 years of age.
4. Isabella H., present age 3½ years; left eye removed when 1 year old.

W. ODILLO MAHER, M.D.,
Ophthalmic Surgeon to the Sydney and
St. Vincent's Hospitals, Sydney.

PREGNANCY IN THE STUMP OF A FALLOPIAN TUBE.

THE patient from whom this specimen was taken was twenty-eight years old. She has been married nine years. There were two

When her abdomen was opened, five hours after the onset of the illness, her pulse was barely perceptible. The abdominal cavity was full of blood clot, and blood was trickling from a rupture in a globular dark blue swelling projecting from the right cornu of the uterus.

The left tube and ovary were intact and normal. Whether it was a case of deciduoma malignum or a ruptured pregnancy which had taken place in the stump of the tube I could not say; at all events, there appeared to be nothing for it but to remove the whole uterus, which I did at once, securing the uterine artery on the bleeding side without delay.



AA—Uterine Cavity. BB—Embryo about 6 weeks. CC—Left Uterine Cornu. D—Left Ovary.
E—Left Fallopian Tube. FF—Cervical Canal (upper extremity.)

children—one seven years of age and the other, who died four months ago, would have been nineteen months old if it had lived. Three years ago the patient underwent operation for a ruptured right tubal pregnancy. At that time, her medical attendant, Dr. Wood, tells me, she was not desperately ill, and she made a good recovery after the removal of the tube. She menstruated last on the 22nd of January. On the 3rd of May she threw some food to the fowls and was immediately seized with severe abdominal pain. Dr. Wood saw her about three hours afterwards, and he was then of opinion that she would not survive the removal to hospital, about a mile distant.

The patient did not lose more than three drams of blood during the operation, and saline solution to the extent of three pints, distributed over the next three hours, together with hypodermics of strychnine, soon placed her out of danger from hæmorrhage and shock.

I feel bound to add that her recovery was largely due to the care she received from Dr. Wood, who was responsible for her after treatment. I am indebted to Mr. Humphrey for the photograph of the specimen, which Professor Welsh has placed in the University Museum.

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Macquarie Street, Sydney.

ADDITIONAL NOTES ON A CASE OF TRICHINOSIS.

W.H.C., whose case I reported in the March number of the *Australasian Medical Gazette*, p. 120, died from heart failure on March 29th last. He first noticed a hard pimple at the outer angle of the right lower lip in October, 1899. This grew rapidly, and in December of the same year was removed in the Adelaide Hospital, and the patient remained apparently well for about six months. In September, 1900, some enlarged glands under the jaw were removed. On February 1st, 1902, patient returned with a fungating epitheliomatous mass and extensive glandular involvement. On February 3rd an incision by Professor Watson from behind the angle of the jaw to symphysis menti, with a second incision downwards to the clavicle. The internal jugular vein and common carotid artery, sterno-mastoid, with portions of digastric and omohyoid muscles, as also the enlarged lymphatic glands and portion of the parotid, were removed *en masse*. Threatened collapse was combated by strychnine and normal saline injections. Next day the patient sat out in the garden in the sunshine and smoked, notwithstanding a progressively persistent overflow of saliva. Three days later, February 7th, soap and thyroid treatment (as recommended by Webb) was commenced, and this, together with the reduced blood supply, appeared to hold the disease in check; but on account of the aggravation of the heart symptoms four weeks later, the administration of thyroid was discontinued, and the patient finally succumbed on March 29th. At the post mortem, held eight hours after death, the emaciated body presented marked rigor mortis. The tongue, the digastric and hyoid muscles, together with the remaining sterno-mastoid and pectoral muscles, were found thickly peppered with encysted trichinae. The intercostals, recti, oblique abdominal muscles and diaphragm were also involved, but in a much lesser degree. There was marked hypertrophy of the left ventricle (corbovis) associated with calcified semilunar aortic and thickened mitral valves. The lungs were cedematous, the bronchial glands pigmented, but not enlarged. The left kidney was very small, $1\frac{1}{4} \times 1$ ", and sclerocystic. The right kidney, on the contrary, was oversized and firm (8 oz.). The liver showed slight interstitial changes. Intestines and bladder were normal.

Mr. Desmond (vet. surgeon) has been unsuccessful in his inoculation experiments on sparrows and mice; but a guinea pig which he inoculated with some minced muscle on March

29th was killed on April 21st, and its muscles, especially those of the throat, were "alive" with trichinae.

E. ANGAS JOHNSON, M.D., M.R.C.S.,
Assistant Physician to the Adelaide
Hospital.

MIRROR OF HOSPITAL PRACTICE IN AUSTRALASIA.

HOSPITAL FOR SICK CHILDREN, SYDNEY.

A CASE OF CIRRHOSIS OF LIVER, WITH OBSTRUCTION OF THE COMMON BILE DUCT, AND DILATATION OF THE DUCT BEHIND THE OBSTRUCTION.

(Reported by Dr. J. M. Gill, Hon. Pathologist to the Hospital).

JANE G., *etat* 4½ years, was admitted into the hospital on March 28, 1902, under the care of Dr. E. J. Jenkins.

History.—Had been ill 10 days; illness commenced with vomiting and feverishness. Epistaxis for two days at the onset of the illness.

On Admission.—Complains of headache and loss of appetite. The bowels were confined.

On Examination.—The abdomen was much distended; the liver was considerably enlarged, and the superficial veins distended; T., 103°. The diagnosis of typhoid was provisionally made.

The child seemed to improve at first, the temperature gradually falling to the normal by April 10th.

On April 17th it is noted that the motions were clay-coloured, and that the child was slightly jaundiced. The temperature had begun to rise again, varying between 100° and 103°. The liver still remained large.

On May 12th it is noted that the liver was increasing in size; motions still quite white, and the urine was dark. The temperature since the last note had been of the hectic type, rising to 102° or 103° at night, and falling to the normal or near it in the morning.

On May 13th it is noted that a large rounded tense swelling had appeared below to and distinct from the liver; it moved on respiration. No fluctuation was observed. The child died suddenly on May 15th.

A post-mortem examination was made on May 16th. There was slight jaundice, and the abdomen was greatly distended, with dilated superficial veins. There was about half a pint of clear fluid in the left pleural cavity, and both lungs were somewhat compressed and airless from the pressure of the distended abdomen, but were otherwise healthy. The heart was healthy. On opening the abdomen several pints of clear, bile-stained fluid escaped.

Liver.—Weight, 35oz.; surface smooth and green in colour; no thickening of capsule. On section it was a bright olive green in colour, and very tough; it was very difficult to make any impression on it; evenly distributed throughout were numerous sacculated dilations of the bile ducts, mostly about the size of the tip of one's finger.

The Gall Bladder was collapsed and contained a little green bile. The cystic duct opened into a large sac, containing about one pint of bile; the walls of this sac were thin and smooth; it was intimately connected with the duodenum, but there was no communication between them. The adhesions between the sac and the duodenum were easily torn and evidently of fairly recent origin. The sac, on the other hand, communicated directly with the two branches of the hepatic duct, and through them with the dilated bile ducts in the liver substance.

The mucous membrane of the duodenum was normal, and no trace could be found of the opening of the common bile duct. The pancreas was normal, and its duct was not dilated. There were some fairly recent adhesions between the sac and the stomach. There were no gall-stones. The spleen was enlarged to about three times the usual size. There was considerable enlargement of the mesenteric glands and those about the pyloric end of the stomach. The other organs were healthy. The intestines contained a good deal of faeces, which were absolutely white and devoid of bile pigment; there were no lesions of typhoid.

Histologically, the liver showed a monolobular cirrhosis; the bile ducts appeared very numerous and conspicuous in each section, but there was no appearance of the formation of new ducts. The deposit of fibrous tissue was most abundant round the portal canals.

Remarks.—As far as the writer knows, this case is quite unique. I can find no record of such an obliteration of the common bile duct, apart from gall-stones. What was the cause of the obstruction? I think that it must have been some inflammatory trouble, dating from 10 days before her admission. The adhesions found at the autopsy would be about two

months old, and the noticeable enlargement of the lymph glands would lend support to that view. Unfortunately, a bacteriological examination could not be made, as the autopsy was not performed till nearly 24 hours after death, and post-mortem changes had already taken place. The case is also interesting as illustrating one cause of cirrhosis of liver. It has been shown by Charcot and others that ligature of the common bile duct is followed by a biliary cirrhosis of the liver; also, in any of those cases of congenital obliteration of the bile ducts which survive their birth more than a few weeks, a biliary cirrhosis is always present. It is, therefore, probable that the cirrhosis in this case was secondary to the obliteration of the common bile duct. A third point of interest is the presence of green bile in the gall-bladder. It is almost invariably the case in complete obstruction of the cystic duct or of the common bile duct to find only colourless mucus in the gall-bladder.

REVIEWS AND NOTICES OF BOOKS.

SOME THOUGHTS ON THE PRINCIPLES OF LOCAL TREATMENT IN DISEASES OF THE UPPER AIR PASSAGES. By Sir Felix Semon, M.D., F.R.C.P. London: Macmillan and Co. (1902).

Readers of the *British Medical Journal* will, doubtless, retain a vivid recollection of these lectures as they appeared in that publication in October last, which must meet with the approval of all practitioners who have escaped the infection of the *cacosthes operandi*. We fancy that these vigorous strictures on reckless and needless operating might apply with equal force to other departments of surgery, and might well be taken to heart by many besides those engaged in the specialty of which Sir Felix Semon is such a brilliant ornament.

G.T.H.

CLINICAL HÆMATOLOGY. A practical guide to the examination of the Blood with reference to Diagnosis. By John C. Da Costa, jun., M.D., Assistant Demonstrator of Clinical Medicine Jefferson Medical College, Hematologist to the German Hospital.

This book on a subject to which increased attention is being paid, even in Australia, can be thoroughly recommended to anyone who desires to get a good grasp of blood work. A sentence in the preface might well be taken to heart by many writers, viz.: "The purpose has been to interpret the blood report according to its true value as a clinical sign, neither exploiting it as a panacea for every diagnostic ill, nor belittling it because of its failure consistently to give the sought-for clue in every instance." Specialists in other branches might well copy his candour. But Da Costa is a clinician as well as a hematologist, this being evident in the paragraphs on "Differential Diagnosis," under which heading we find many valuable clinical as well as hematological facts. That section of the book devoted to "Methods" is very full, in spite of which mention is only made of one way in which to prepare a blood film for staining

purposes, viz., by means of opposed cover slips; yet in the opinion of many a much easier and better way is to smear a glass slide with the blood by means of cigarette paper. With regard to hæmoglobinometers, the author appears to favour Von Fleischl's, though in the absence of a complex hæmoglobinometer he approves of Tallquist's method, which is much simpler but only approximate. Mention is made of a test for differentiating human blood stains (no matter how old or how contaminated they may be) from those of animals: this is quite a recent development, is apparently well corroborated, and is naturally of great medico-legal importance. In the section devoted to "The Blood as a Whole," it is interesting to notice that the blood in carcinoma contains an excess of sugar, whereas there is no increase in sarcoma. To make blood cultures (in order to ascertain the presence or otherwise of bacteria) Da Costa suggests, for very good reasons, that a fluid medium should be used, but he omits to say that a solid one should be employed also, for the colour of the organism is not shown up in the fluid medium, nor does the staphylococcus grow so typically. Of all the sections, perhaps that devoted to the "Leucocytes" should prove the most interesting to the reader, since with a little practice their number is easily estimated, and in many diseases they alone need be counted. Their function is generally considered to be phagocytic, and at the same time bactericidal by means of the chemical substances which they produce. Diseases of the blood itself are treated separately from those diseases that react secondarily upon it, and under this heading we find the blood changes of "Pernicious Anæmia" at full length. In this connection it is interesting to note that the colour index is not invariably above 1.00, especially in those cases where the patient is making rapid improvement (the excess of corpuscular gain over that of hæmoglobin temporarily reducing the index under 1.00). The author lays great stress on the predominance of megaloblasts as the chief diagnostic aid to that disease, in this respect differing from other anæmias, such as those due to enteric fever, chronic gastric catarrh with atrophy of tubules, and gastric cancer, etc., which may resemble it in the large reduction of red corpuscles. It will surprise some to know that the author still recognises splenic anæmia as a distinct disease. A separate section is devoted to the "Anæmias of Infancy and Childhood." This is well deserved, since the description of the blood changes of a disease in an adult frequently would not correspond to those found in a child. An interesting statement by Morse is quoted, to the effect that the serum test of enteric appears earlier, is less marked, and persists for a shorter period in children than in adults. In the last section of all, that devoted to "General Hæmatology," the blood changes of 68 diseases (arranged alphabetically) are discussed. Without being given a special paragraph, the blood conditions of some of the less common diseases (but which may be confused with the more common ones clinically) are also mentioned in the differential diagnosis. Considering the great value of the blood as a means of diagnosing enteric fever, one would have expected a fuller account than is given. Under "Diphtheria" mention is made of the fact that in cases treated with antitoxin the anæmia is decidedly less than in those treated by other methods. "Malaria" is dealt with very fully; but one is surprised to see that more mention is not made of Manson's work on this subject. The book would have been more complete had "Pelvic Diseases" been included. "The Chemistry of the Blood" is touched upon here and there, though it is mainly the corpuscular elements that are dealt with; a great deal yet remains to be done on the former. The importance of the study of the blood—a fluid upon which every organ and tissue of the body is nourished—cannot be over-estimated.

H.S.S.

MANUAL OF PHYSICAL DIAGNOSIS, for the use of Students and Physicians. By James Tyson, M.D., Professor of Medicine, University of Pennsylvania, and Physician to the University Hospital, etc. Fourth edition, revised and enlarged. Philadelphia: P. Blakiston's, Son & Co. (1901).

The popularity of this small handbook is proved by the fact that a fourth edition has been called for, and the author has taken the opportunity of revising and enlarging the work. The descriptions of the physical signs of the heart and lungs are excellent, not being over-burdened with minute details, and yet containing many useful points in the diagnosis of chest disease. The chapter on the examination of the blood contains all that is really necessary for the general practitioner, and includes not only the method of counting the corpuscles, but also gives full directions for the examination of the blood for micro-organisms. There is also a very good account of the method of chemical examination of the stomach contents. The only defect in the book, we think, is the absence of any description of the method of examination of the nervous system, and the chemical examination of the urine. As, however, these are so well dealt with in special works, their absence from this work does not detract materially from its general excellence and usefulness.

G.E.R.

A CONTRIBUTION TO THE STUDY OF THE BLOOD AND BLOOD PRESSURE. By George Oliver, M.D., F.R.C.P., Lond. London: H. K. Lewis (1901).

In this book Dr. Oliver has reprinted portions of his Croonian Lectures, delivered before the Royal College of Physicians of London in 1896, with some considerable additions, the result of his subsequent studies in this direction. He describes first of all some hæmometric methods which he first brought under the notice of the Physiological Society at University College, London, in 1896, and then deals with the normal physiology of the blood corpuscles and the hæmoglobin. We then have a description of the apparatus in use for estimation of the blood pressure, both arterial and venous. A careful investigation of the variations of the blood pressure in different diseases and in different conditions in the same patient is a matter of importance in arriving at an accurate diagnosis; and the use of Oliver's instruments should conduce to render this investigation both simple and accurate. The concluding chapters on the physiological and clinical variations in the circulation are interesting and instructive. This book is well worth careful study by all who are more particularly interested in blood work.

G.E.R.

TYPHOID AND TYPHUS FEVERS. By Dr. H. Curschmann, of Leipzig. Edited, with additions, by William Osler, M.D., Professor of the Principles and Practice of Medicine, Johns Hopkins University. Handsome octavo of 646 pages, illustrated, including a number of valuable temperature charts and two full-page coloured plates. Philadelphia and London: W. B. Saunders and Co. (1901). Melbourne: James Little. Cloth, 25s. net.

Typhoid fever is a disease of never-ending interest to all practitioners in this country, and the American edition of Professor Curschmann's work on "Typhoid and Typhus Fevers" is a work well worth having in one's library, particularly when one finds that Professor Osler, of Baltimore, is responsible for many valuable additions to almost every chapter of the original German edition. The chapter on Bacteriology has been thoroughly

revised, and much new material added, giving prominent consideration to the distribution of the typhoid bacilli, especially in the urine, the rose-spots, and the blood. Much valuable material has been added to the chapter on Diagnosis by Bacteriological methods, particularly with reference to the recent work in blood-cultures and on the detection of bacilli in the urine. To the chapter on Pathology many minor additions have been made, incorporating the important work of Mallory. The literature on the localised lesions due to the bacillus has been carefully reviewed and made to conform to the most recent advances in that part of the subject. Thayer's exhaustive study of the state of the blood has been utilised, and the surgical aspects of typhoid fever have been fully revised with the aid of Keen's monograph. The chapter on Perforation and Peritonitis has been practically rewritten, as has also the section on the Hepatic Complications of Typhoid. We have no hesitation in stating that this book is, in our opinion, the best monograph on the subject in the English language. G.E.R.

GONORRHOEAL ARTHRITIS: ITS PATHOLOGY, SYMPTOMS, AND TREATMENT. L. Vernon Jones. London: H. K. Lewis. 1902.

In this booklet the author treats his subject under three headings—Pathology, Symptoms, and Treatment. In the chapter on the pathology of the disease he rightly accepts the fact that the phenomenon is due to the entrance of the specific germ into the blood or lymph streams and its consequent dissemination throughout the body. The section on treatment recommends that every attention be paid to the urethritis; but the multiplicity of the methods of cure is, if anything, a sign of weakness, and, strange to say, no mention is made of urethroscopic examination in cases of chronic urethritis. There appears to be a considerable amount of blind faith in the drug treatment for the joint conditions. The sound, sensible advice that the joint should be kept absolutely at rest until all acute inflammatory symptoms have subsided is to be commended. However, on the whole, the book very well represents the generally accepted views on the subject of gonorrhoeal rheumatism. H.C.H.

CLINICAL LECTURES ON STRICTURE OF THE URETHRA AND ENLARGEMENT OF THE PROSTATE. By P. J. Freyer, M.D., M.Ch. Second edition. London: Baillière, Tindall and Cox. 1902.

Although there is very little that is new in the first part of this book the lectures are extremely good reading, inasmuch as the author places the whole subject in such a systematic and concise style. The preliminary chapter on prostatic hypertrophy contains some information likely to be of use to those patients who refuse radical treatment; but it would be as well to remember that formalin vapour will not sterilise a catheter actual boiling or the action of superheated steam being necessary to bring about the required result with certainty. Organisms are no doubt repeatedly introduced into the bladder; but provided that the epithelial lining of the bladder is intact, and provided that decomposition of the urine does not occur, these organisms are expelled frequently without any ill-effects being experienced. Nevertheless, for obvious reasons, the strictest asepticism should be observed. The last chapter contains the author's recent work in connection with the complete removal of the prostate, and for this he deserves the greatest praise. Freyer may not have been the first to wholly and completely remove the prostate, but he was

certainly the first to recognise the value and importance of the step, and to place the operation on a sound surgical basis. The book is undoubtedly a clear *résumé* of our present knowledge of the subjects treated. H.C.H.

THE RONTGEN RAYS IN MEDICINE AND SURGERY. By F. H. Williams, M.D., Harvard, Visiting Physician at the Boston City Hospital, etc. New York: The Macmillan Company. London: Macmillan and Co., Limited (1901). Demy 8vo., pp. 691; 25s.

The introductory chapters of this work deal with the nature and properties of the X-rays and the apparatus used for their practical application in medicine and surgery. Next comes an introduction to the examination of the thorax, and many diagrams are shown of the normal chest. Fifty pages are devoted to pulmonary tuberculosis, and here Dr. Williams points out the usefulness of an early examination with the fluorescent screen, and how an examination so made may very often be the means of revealing early tubercle of the lung before any symptoms or physical signs are present. In later stages particular attention is drawn to darkened lung areas, restricted excursion of diaphragm, and displacement of the heart. Pneumonia is then discussed, and eighty pages are devoted to other lung lesions, such as emphysema, bronchitis, pleurisy with effusion, empyema, hydrothorax, pneumothorax, etc. This portion is profusely illustrated, and numerous cases which have been examined by the author are reported. The heart and thoracic aneurisms are very fully discussed and illustrated, and an interesting table gives the result in 155 cases of the difference of X-ray and percussion determination of the left heart border at the nipple level during expiration; and with a chapter devoted to new growths, enlarged glands, abscess, and gangrene of lung, the thoracic portion of the book concludes. Sixty pages are next occupied in describing the therapeutic uses of the X-rays, and their action on bacteria. Here, again, the many cases cited are illustrated, but, unfortunately, all the photographs are out of focus, and, consequently, are lacking in sharpness and detail. Portions of this chapter, especially those referring to hypertrichosis and lupus vulgaris, are not up to date, for very few operators now utilise the rays for this purpose, as recurrences have so often happened. An introduction to surgery forms the next subject, and a detailed description is given of the many uses of the X-rays from the surgeon's standpoint. Special mention is made of the necessity of taking two skiagrams from different points in the case of fractures, and in cases of doubt, of taking several. Many beautiful illustrations are given. Dealing with the subject of foreign bodies, various localisers are mentioned and described, and special reference is made to the well-known Mackenzie Davidson localiser. A special chapter deals with diseases of the bones and the joints, and is profusely illustrated. Strange to say, not very much space is devoted to calculi, no doubt owing to the fact that the author has not had much experience in this branch; nevertheless, what is mentioned is terse and to the point. Much more, however, might have been added with advantage in dealing with this all-important subject. The volume concludes with a reference to the usefulness of X-ray examinations to life assurance companies and medico-legal uses of the rays, together with a few pages devoted to examination of food and drugs, and veterinary medicine. This work is a proof of the vast amount of experience Dr. Williams has had in connection with the X-rays, and too much cannot be said for the explicit and masterly way in which the whole subject has been handled. L.H.H.

ATLAS AND EPITOME OF OPHTHALMOSCOPY AND OPHTHALMOSCOPIC DIAGNOSIS. By Prof. Haab, of Zurich. Edited by G. E. de Schweinitz, Am. M.D., Professor of Ophthalmology in the Jefferson Medical College, Philadelphia, &c., &c. With 152 coloured lithographic illustrations; 12mo. Third edition. Price, 15s. W. B. Saunders and Co., Philadelphia and London. Jas. Little, Melbourne.

This is a companion volume to the author's "Atlas of External Diseases of the Eye." The plates give generally, as nearly as is possible in a chromograph, the appearances presented in various diseases of the fundus, though some, e.g. detachment of the retina, and "shotted" fundus are from inherent difficulties imperfectly depicted. Coloured illustrations of microscopic appearances of various lesions are also given. Some 60 pages are devoted to a description of the ophthalmoscope and ophthalmoscopy. Retinoscopy is dismissed in a couple of pages (though the editor adds a little on his own account). It appears to us that all this portion might with advantage have been omitted as foreign to a work of this character, especially as it is too meagre to be of any practical use, and it is fully explained in the textbooks. We are unable to agree with the author's opinion that "ophthalmoscopic examination is one of the most difficult of the methods of medical examination"—though the interpretation of what one sees is a different matter. The book should be a valuable help to students and useful for reference for practitioners who are not in the way of frequently seeing diseased fundi. It has rapidly run into a third edition. Among the new illustrations in the present edition are those of leukaemia, glioma, airbubble in retinitis after trauma, syphilitic, enteritis, senile pigmentation of retina, perforation in the macula, hyaline bodies (*drusen*) in the lamina vitrea, and a few others; also a pupillometer scale. F.A.P.

AN INTRODUCTION TO DERMATOLOGY. By Norman Walker, M.D. Second edition. Bristol and London: T. H. Wright and Son.

The second edition of Dr. Norman Walker's book has appeared, enlarged in text and contents. It is well and freely illustrated, as all manuals on diseases of the skin should be. Although modestly termed "An Introduction to Dermatology," it will be read with interest and profit by all. Written in lucid, easy, and scientific style, it is eminently an advanced and up-to-date publication, containing much excellent practical advice. It everywhere gives evidence of great clinical and histological experience on the part of the author. Dr. Walker cannot be accused of slavishly following existing textbooks in his descriptions of the various diseases of the skin, and if in his endeavour to be brief he occasionally fails to strike a picture, his explanation of the nature of the disease is always admirable. His definitions are his own, too, as witness eczema, which he says is "the term commonly applied to any wet or scaly eruption of the skin, of the cause or nature of which the observer is ignorant." The writer is strongly in touch with the most recent and advanced views of the Continent and Great Britain, and these are given, together with his own comments, all through the publication. His article on Herpes Zoster is excellent, its etiology, which is re-written, being the elucidation of what in most textbooks is a confusing subject. He adopts the view that Psoriasis is an extremely dry form of seborrhoea; whilst Rosacea, too, is simply a seborrhoeic dermatitis. His Acne Vulgaris is the subversion of every ordinary view on the subject. His treatment is of the latest description, much prominence being given to new methods and new preparations, in which the glycolgelatins, plaster

mulls, medicated soaps, &c., find a large place. Altogether, Dr. Norman Walker's book will be found to be an able, interesting, and valuable contribution to the subject of diseases of the skin. F.A.B.

THE POETICAL WORKS OF BRUNTON STEPHENS. Sydney and Melbourne: Angus and Robertson, 1902.

This collection of Mr. Brunton Stephens' poetical works contains 58 poems, with the majority of which readers are familiar through their having appeared in the collection of Mr. Stephens' works published some thirteen years ago. About quarter of the number now presented have been written since the earlier publication. The new volume commences with "Fulfillment," dated January 1st, 1901, written in celebration of the accomplishment of the Federation of Australia. "A Coin of Trajan in Australia" and "The Chamber of Death" are among the most noticeable of the later works. "A Convict Once," which is a sustained effort in verse, covering over a hundred pages, brings the present volume to a close with its appeal to "Euthanasia." A considerable portion of the collection consists of humorous verses. Among these "My Chinese Cook" is the best known and the most deservedly popular; while among the serious poems the two versions of an "Australian Anthem" attract attention, each being representative of a distinct political mood. The true position of a poet is a point which must be left to posterity to decide upon, but it is not unlikely that the name of Brunton Stephens will remain in the first rank of early Australian writers. R.H.T.

Hobart General Hospital.—The annual report, in the form of a supplement to the *Government Gazette*, is to hand. After referring to the loss sustained by the death of Dr. R. S. Bright, who gave 41 years' invaluable assistance and devotion to the welfare of the hospital, it adds that thanks are due to the Honorary Medical Staff who, without regard to personal comfort or need of bodily rest, at all hours have been ready to answer the calls of suffering humanity with cheerful sacrifice. The total number of in-patients treated was 1446, or five less than during the preceding year. Of these 89 proved fatal, 29 deaths occurring within 72 hours after admission. The average stay of patients was 20½ days, the lowest yet recorded. The expenditure for maintenance does not differ appreciably from that of the previous year, though the enhanced price of fuel, meat, etc., has increased the expenses somewhat. The average cost per patient was £4 1s 11d, as compared with £4 0s 1½d last year, and £4 0s 1½d in 1899. The average cost of occupied bed was £74 0s 9½d. Mention is made of the fact that the hospital has been enrolled as a hospital recognised by the council of the Australasian Trained Nurses' Association, and the report finishes with the following significant words: "Under the present Federal Customs arrangements the upkeep of the hospital will be materially increased, it having been decided that in future duty will have to be paid on the majority of the goods imported for hospital requirements. This change of affairs will, it is anticipated, increase the expenditure of the hospital by £300 per annum."

Miss WARD, late Matron of the Yass District Hospital, having opened a Private Hospital at Yass under the supervision of Drs. Thane and English, is prepared to take in a few cases of incipient Phthisis for treatment. Terms, from Two Guineas a week and upwards. Apply to Miss WARD, "Lilawaden," Private Hospital, Yass.

THE AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, 20TH AUGUST, 1902.

MEDICAL MEN AND THE LAY PRESS.

MUCH discussion has taken place, not only in medical circles in Sydney, but also in the lay press, on the interviewing of some medical men in Sydney on the occasion of the King's recent illness, and the reporting of their opinions in the columns of the daily newspapers. On the one hand, it is asserted that the publishing of medical practitioners' names in interviews on the subject is a specious form of advertising, and is contrary to the recognised rule of medical ethics, which considers all advertising derogatory to the dignity of the profession; and that the seizing upon any subject of current public interest by any medical practitioner to advertise himself in the columns of the daily press is, to say the least of it, in bad taste.

But we have to look at this question also from the point of view of the journalist. With the great increase in education of the general public a demand is made for information on all sorts of subjects from the lay press, and the newspaper reporter has to hunt round for "copy" to meet that demand. We must, too, remember that in matters of public health the medical profession must be the educators of the general public, and endeavour to mould public opinion in the right lines; and we fully recognise the importance of this part of the work of the profession, and the responsibility thrown upon it if it fails to speak out in time of emergency. But it is quite another matter when the lay press seeks to give information to the public on strictly medical matters which cannot be properly understood except by those who have had a scientific training in anatomy and pathology.

The discussion at the last meeting of the New South Wales Branch of the British Medical Association on the motion submitted by Dr. WORRALL, though marred by some unseemly personalities, and leading to no definite conclusion on the question, undoubtedly did good in ventilating various opinions; and there can be no doubt that the general feeling was against any deviation from the time-honoured practice of the profession in abstaining from advertising. Some part of the lay press has entirely misunderstood the attitude of Dr. WORRALL and his supporters, and has attempted to indict them on a charge of trying to gag the mouths of members of the profession. Nothing was farther from Dr. WORRALL's intentions. He and his supporters have not the slightest objection to the fullest expression of opinion by competent medical men on matters of great public or national importance. All that was sought was to prevent the names of medical men giving such information appearing in the lay press in such manner as to impress the public that these gentlemen were the only recognised authorities competent to speak on the subject. The suggestion that this action arose from motives of professional jealousy is not worth considering. The failure to secure the passage of any definite resolution on this question was to some extent, at any rate, due to the uncertainty in the minds of a large section of the meeting as to how far it is wise to bind members of the Branch by hard and fast lines, instead of leaving matters of this kind to individual good taste and feeling.

Dr. FIASCHI has given notice of a motion for the appointment of a committee to consider the relations of medical men with the lay press, and to draw up some resolution on the subject. Whatever may be the result of this motion, or of the deliberation of this committee, we cannot help thinking that if in the future any medical man in private practice allows himself to be interviewed by reporters of the daily newspapers, and consents to his name appearing in connection therewith, though he may not be

guilty of any serious breach of medical ethics, will nevertheless offend the sensibilities of the majority of his fellow-practitioners.

INQUESTS ON DEATH UNDER OPERATIONS.

From time to time the surgeon is called upon to operate on patients in extreme danger; the operation may be the only possible chance of saving life, and yet be itself attended by very serious risk. If the patient die under the anæsthetic the matter is reported in the daily newspaper, a coroner's inquest is held, and the unfortunate surgeon and anæsthetist are advertised in a most unfavourable way. This is extremely unpleasant to the medical men concerned, and yet it is one of those unfortunate circumstances which are likely to occur to any one engaged in this line of practice. The question arises: "Is an inquest necessary in a case of this kind?" While a large discretionary power is given to a coroner to decide whether an inquest should be held or not, it is clearly his duty to inquire into the circumstances attending the death of any patient in a public hospital which has occurred as a result of, or has been accelerated by an anæsthetic or operation or both. Public hospitals are supported by public subscriptions and Government subsidies, and it is essential that the confidence of the public in the management of the hospitals and the medical staffs should be maintained. Moreover, it is in the long run to the advantage of the medical men concerned that the fullest publicity should be given to all the circumstances of the case, so that no sinister remarks and rumours should be circulated that Dr. So-and-so killed his patient. An attempt to conceal facts and hush up the case will only do the practitioner harm, and lead to the belief that in some way or other he was responsible for the death. We are well aware that some surgeons do not regard the matter in this light, and look upon inquests in these cases as unnecessary,

and as creating an unfair prejudice against them in the eyes of the public.

But though the surgeon may not take the same view as the coroner, if that officer in the exercise of his discretionary power decide upon holding an inquest, it is certainly the duty of the practitioners concerned to render him all the assistance they can, and they will then be fully exonerated from all blame by the coroner's jury and the general public. We much regret that DR. BATCHELOR, of Dunedin, in a case which recently occurred in his practice in that city, did not adopt this course. He was called upon to operate on a woman in a desperate condition with a large ovarian tumour. It was a matter of extreme urgency to operate to give the patient any chance of life; unfortunately she died under it. DR. BATCHELOR, the most interested witness, instead of assuming the attitude of an impartial expert, in open Court, practically censured the coroner for holding an inquest, a proceeding which called forth a protest from the foreman of the jury. We think, too, it was an error of judgment on the part of DR. BATCHELOR not to have allowed the matter to drop after the jury had given their verdict. Further discussion in the lay press could do no possible good, and would only tend to prejudice the public against him in the illegal attitude he had taken up. We deeply sympathise with DR. BATCHELOR in the unfortunate position in which he was placed by his zeal for the welfare of his patient, and we hope that he will not have again to pass through a similar experience.

THE MONTH.

The Proposed Consumptive Hospital for Sydney.

We regret that the matter of establishing a hospital for chronic cases of pulmonary phthisis near Sydney seems almost as far off as ever. The suggestion of the committee appointed at a joint meeting of the medical staffs of the large metropolitan hospitals that a hospital for this purpose should be erected near Hornsby

has aroused so much opposition that the Government do not appear disposed to press the matter. We must again urge upon the Government the necessity of this institution, and if the Hornsby site cannot be obtained some other locality must be selected, and the building proceeded with without further delay.

Suture of the Spinal Cord.

We are accustomed to hear some "tall" stories from America, and make due allowance for the American's tendency to exaggerate. In a recent issue of the *Philadelphia Medical Journal* there is an account of a case of a young woman, 20 years of age, who was shot in the back by her lover. The shot entered the spinal canal, and there ensued complete paraplegia. The spinal canal was laid open within three or four hours of the injury, and the spinal cord was found to be completely severed, the two ends of the cord being separated by an interval of three-quarters of an inch. The two ends were brought together by sutures, and in five days there was reported to have been some return of sensation in the legs, and in 16 months afterwards a considerable amount of motor power had been recovered. These statements are vouched for by several witnesses. We shall publish in our next issue in the "Review of Current Medical Literature" a full account of this remarkable case. We refer to it now so that should any surgeon meet with such a case he may feel disposed to follow the example of the American surgeon.

Gaol or Asylum?

The present system of treating pauper persons of unsound mind as criminals cannot be too strongly condemned. In the annual report of the Comptroller-General of Prisons in New South Wales it is stated that "it is unfortunate that gaols should be used for the medical treatment of persons innocent of crimes, because it is wrong to use gaols as hospitals, wrong to brand innocent persons with the prison brand, and wrong to swell in such a manner the crime statistics of the State. During the year 500 persons were received on charges of insanity, and many for protection and medical treatment." Quite so; and the sooner such a state of things is abolished the better for our common humanity. The English Lunacy Commissioners have reported strongly against persons suspected of being of unsound mind being handled by policemen and brought before the police courts, since an ordeal of this nature may be sufficient to completely upset the balance of a mind already unstable, but which might be soon restored if placed under suitable treatment in a reception-house.

Persons suspected of being of unsound mind should not be compelled to go either to gaol or to an asylum in order that their mental condition may be definitely ascertained. They should be treated in the same manner as patients who are suffering from physical illness, and taken to an institution suitable for this purpose. An unfortunate case has recently occurred in Melbourne of a patient dying in the Melbourne gaol hospital of broncho-pneumonia after having been twice remanded there from the police court on a charge of being of unsound mind. All the medical men concerned in the case were of opinion that the man should have been sent to the asylum hospital instead of being sent to gaol. Yet this poor man dies in gaol, is branded as a criminal, his only offence being mental illness! It is a disgrace to the boasted enlightenment of the twentieth century that such a thing could happen in our midst.

The Treatment of Mental Diseases in General Hospitals.

In a recent issue of the *Intercolonial Medical Journal* Dr. Springthorpe, of Melbourne, deals with the question of the possibility of treating early and mild cases of mental disease in the wards of the general hospitals. This matter has recently been brought forward in Edinburgh, and the alienists of that city are strongly in favour of the adoption of this course. There is much to be said in favour of it. With the advance in our knowledge of the pathology of the insanities we are coming more and more to recognise that states of temporary mental aberration depend, to some extent at any rate, upon disturbance of the bodily functions, and as such are as suitable for treatment in general hospitals as cases of any specific disease, such as typhoid fever. Moreover, in many cases of mild melancholia it is difficult to get sufficient data to warrant a medical practitioner in signing a certificate of insanity; yet the patients are mentally ill, and require special treatment. In the present crowded state of general hospitals cases of this nature cannot be admitted, or if admitted are as soon as possible drafted off to the hospitals for the insane. We hope, however, that so far as Sydney is concerned, when the Prince Alfred Hospital additions are completed, some provision will be made for the treatment of cases of this nature, and patients will be spared the unnecessary stigma of having been in a "lunatic asylum."

Stereoscopic Photography in Medical Work.

At a recent meeting of the South Australian Branch of the British Medical Association a paper was read by Dr. Souter on the use of

stereoscopic photography in illustrating medical and surgical subjects. He pointed out that the stereoscopic photograph gives a concrete sense of shape, comparative size and actual distance, which an ordinary photograph never can. This point is well brought out in the excellent stereoscopic pictures we publish in this issue, illustrating Dr. Nolan's paper on the Facial Nerve in Relation to the Mastoid Operation. It is intended that the plate of photos should be cut out, the individual pictures pasted on cardboard and viewed through a stereoscope. If this be done one gets an excellent view of the relations of the different parts of the dissections. It is interesting to note that the *British Medical Journal* in its Special Vaccination Number has published some stereoscopic pictures of a case of smallpox, which show very well the character of the eruption. It is probable that in the future this method of illustration will be largely adopted.

Hospital Abuse in New Zealand.

A correspondent sends us the following:—"A township in a mining field of 1500 inhabitants has two medical men. There is a local hospital and three benefit societies, all employing one of these gentlemen, who has also the right of private practice. The other medical man relies solely on private practice, and his income is derived largely from the miners. The chairman of the local hospital board has addressed meetings of the miners in different localities offering them for 12s a year all the benefits of the hospital as to residence, medical attendance and medicine. Further, the money thus obtained is treated as a subscription to the hospital, the trustees or board claiming on it the Government subsidy of 24s for each £. Thus it is proposed that the whole community of miners, by payment of less than 3d a week (subsidised by Government grant), shall become members of the hospital and may enjoy any or all its advantages." It is difficult to condemn in strong enough terms such an iniquitous proposal. The function of a hospital is to provide medical attendance to persons in need of charitable assistance in time of sickness. With three benefit societies in a small township there is surely enough provision made for medical attendance on those unable to pay ordinary medical fees, and to attempt to convert a hospital into a fourth benefit society without any limitation as to the means of those who may join it is to do the local medical men a gross injustice. We sincerely hope that both these gentlemen will decline to attend the hospital under these circumstances, and that the hospital board will be brought to see that this proposal is an abuse of the true function of a hospital.

The Sydney Pathological Club.

A pathological club on the lines of similar institutions in Great Britain was inaugurated in Sydney in June last. Dr. Welsh, Professor of Pathology in the Sydney University, was elected president for the year, and Dr. Sydney Jamieson honorary secretary and treasurer. The first meeting for work was held on July 30th in the pathological laboratory of the Sydney Hospital, and was a great success. The most interesting communications were from Professor Elliott Smith, of the University of Cairo, on "Prehistoric Pathology," and Professor Symmers, Professor of Pathology in Cairo, on "The Lesions Produced by the Bilharzia." Some macro-and-microscopic specimens were exhibited by other members.

Too Bad!

The Australian Natives' Association has come in for some hard hits since its inauguration as a medical benefit society in New South Wales. It has been compared to Tammany Hall in New York, and has been described as a "medical sweating institution." Its representatives have been asked to retire (not to be too hard on the A.N.A.) from the United Friendly Societies' Association. But it is really too bad of an English newspaper to speak of the Australian Natives' Association as composed of 20,000 aboriginals! Fancy an association actuated by high and patriotic motives being thought to be composed of blackfellows! We would humbly suggest that the A.N.A. should adopt as one of the planks of their platform the education of the English public, so that such a terrible mistake may not be repeated.

The American Association of Urologists.—

This association was organised on February 22nd, 1902, essentially for the purpose of further development of the study of the urinary organs and their diseases. Although most of the founders of the association are specialists in genito-urinary diseases, membership includes gynaecologists who embrace renal and vesical surgery in their work, also gentlemen who devote themselves to the microscopy and chemistry of the urine as well as those interested in the study of the kidney from a medical standpoint. The association consists of active, corresponding, and honorary members, and is in great measure modelled upon the plan of the *Société Française d'Urologie* modified to suit American circumstances and conditions. The work of the association is principally clinical, for the demonstration of new methods in the technique of examination and treatment. The officers of the association are:—Ramón Guiteras, M.D., president; Wm. K. Otis, M.D., vice-president; John Van der Poel, M.D., treasurer; Ferd. C. Valentine, M.D., secretary; A. D. Mabie, M.D., assistant secretary.

BRITISH MEDICAL ASSOCIATION NEWS.

PROCEEDINGS OF AUSTRALASIAN BRANCHES.

New South Wales.

THE regular monthly meeting of the Branch was held at the Royal Society's Room on Friday, 25th July, 1902, Dr. G. E. Kennie (president), in the chair; there were 78 members present. Visitor, Dr. Grace Russell.

The minutes of the previous meeting were read and confirmed.

The PRESIDENT announced the election of the following members:—Drs. A. S. Marr, E. W. Buckley, and Harrie Cox.

The following were nominated for election:—Dr. H. S. Capper, Dr. Dight, and Dr. G. P. Woodward, Sydney.

Dr. WORRALL moved an addition of the following to the Articles of Association:—"No member of the New South Wales Branch of the British Medical Association engaged in private practice shall allow himself to be interviewed on professional matters by representatives of the lay press, without a written undertaking that his identity shall not be disclosed."

Dr. HINDER seconded the motion.

Dr. HANKINS moved the following amendment:—"That in the opinion of the New South Wales Branch of the British Medical Association no member engaged in private practice should allow himself to be interviewed on professional matters by representatives of the lay press, without a written undertaking that his identity shall not be disclosed."

Dr. CLUBBE seconded the amendment.

Dr. FOREMAN proposed a further amendment, as follows:—"That the New South Wales Branch of the British Medical Association disapproves of any member allowing his name to appear in interviews with the lay press."

Dr. McDONAGH seconded this amendment.

After discussion by Drs. Brady, Jamieson, and McKay, a letter from Dr. Sydney Jones was read.

Dr. FIASCHI then moved a further amendment, as follows:—"That no member of the New South Wales Branch of the British Medical Association engaged in private practice should allow himself to be interviewed on purely medical questions having no direct bearing on matters of national or public interest."

Dr. F. H. QUATRE seconded this amendment.

A discussion ensued, in which Drs. Beeston, Palmer, Tidswell, Arthur, Bowker and Goode took part.

Dr. WORRALL withdrew his motion in favour of Dr. Hankins' amendment.

Dr. Fiaschi's and Dr. Foreman's amendments were then put to the meeting and both were negatived.

Dr. Hankins' motion then became the substantive motion, and on that Dr. Camac Wilkinson moved the previous question and Dr. Beeston seconded. The previous question was carried, with the result of postponing the settlement of the question *sine die*.

COUNCIL MEETING.

The Council met at the Association Rooms on Friday evening, August 1st, 1902, at 8.30 o'clock. Present: Drs. Rennie, Crago, Beeston, Jamieson, Pockley, Dick, Hankins, Hinder, Newmarch, Worrall, Fiaschi, and MacCormick.

The minutes of the previous meeting were read and confirmed.

The following new members were elected:—Dr. H. S. Capper, Potts Point; Dr. G. P. Woodward, Sydney.

An apology was received from Dr. Foreman for non-attendance.

A letter was read from the medical men at Inverell with reference to the lodge practice in that town.

Resolved—That the Council take no further step in this matter at the present time, and that the Grand Secretary of the M.U. be so informed.

Correspondence from the Balmain Friendly Societies' Institute, stating that a conference had been held with the A.N.A. on July 12th, and asking for an extension of time to make arrangements for severing themselves from the A.N.A.

Resolved—That the Balmain Dispensary be asked to state what steps were intended to be taken to get rid of the A.N.A. during the extension of time to 12 months, seeing that there was a legal difficulty in the way at the present time; also what guarantee they were prepared to give that the present membership should not be increased during the extension of time.

Letter was read from the North Sydney Dispensary asking for reasons why the institute had been placed upon the black list.

Resolved—That the North Sydney Dispensary be informed that the dispensary had been proclaimed inimical to the interests of the medical profession because the institute had appointed medical men at rates lower than the North Sydney Medical Association had agreed upon as a minimum.

Letter from the Granville Lodge Ancient Order of Druids was read with reference to the appointment to that lodge of one of the medical officers of the A.N.A.

Read—Letter from Dr. Eames with reference to statements in *Hansard* concerning Dr. Woodward.

Resolved—That the Council expresses its sympathy with Dr. Woodward in the unfounded charges against him which were reported in *Hansard*.

The Commonwealth Medical Society.—It was reported that the above society had amalgamated with the Phoenix Mutual Provident Society, and that the medical officer of the latter institution had asked for an expression of opinion as to whether he should continue to hold the appointment.

Resolved—That the society was not one that should be recognised as a Friendly Society.

Letter was read from the Western Suburbs Medical Association asking what should be the fees (1) for ordinary life assurance, (2) for industrial assurance, (3) for Canadian Independent Order of Oddfellows.

Resolved—That if only a certificate of health be required 10s 6d should be the charge, but where a schedule is required to be filled in £1 1s should be charged.

Dr. BEESTON stated that the medical men in Newcastle would be glad to have a general meeting of the Branch held in Newcastle.

Resolved—That a general meeting of the Branch be held at Newcastle during the month of October.

Library.—Dr. JAMIESON called attention to the fact that a number of books had been borrowed from the library and not returned, and asked permission to deal with this matter. It was also reported that a complete catalogue had been prepared.

Resolved—That Drs. Dick and Jamieson be appointed a sub-committee to draw up regulations for the library.

Dr. CRAIG reported that the credit balances were as follows:—General account, £192 15s 6d; *Gazette* account, £142 1s 9d.

Account passed for payment, petty cash £3.

Resolved—That a special general meeting of the Branch be held on Thursday, 14th August, 1902.

Victoria.

COUNCIL MEETING.

A MEETING of the Council of the Victorian Branch British Medical Association took place on July 2nd. The minutes of last meeting were read and confirmed.

Correspondence.—Letters were read from Dr. Crago re Hobart and Launceston Branches of the B.M.A.

Dr. Sloggett, of South Melbourne, and Dr. Joske, of Prahran, were proposed as members by Dr. Vance, and seconded by Dr. McCansh.

A member of the Council drew attention to the humiliating position that the medical profession had been placed in by the new district coroner, and expressed a hope that steps would be taken to find out if the interpretation of the law expressed by Dr. Cole was favoured by the Crown Solicitor.

A sub-committee consisting of Dr. McCansh (president), Dr. Vance (secretary), and Dr. Bryant (lit. editor) was appointed, and the secretary was instructed to write to Dr. Cole, enclosing a copy of a paper containing the report of a case on which he had adjudicated, and which contained remarks considered by the Council of the B.M.A. highly detrimental to the profession, and altogether unwarranted. The secretary was instructed to ask if in this report Dr. Cole had been reported truly and accurately.

South Australia.

THE twenty-third annual meeting was held at the Adelaide University at 4 p.m. on Wednesday, June 25, 1902. The President (Dr. Todd) took the chair, and 25 members were present.

Minutes for last annual meeting were taken as read and signed.

Election.—Drs. Oscar Flecker and Robert Muir were elected members of the Branch.

The annual report of Council and the treasurer's balance-sheet were adopted.

The twenty-third annual report of the Council, June, 1902, was as follows:—Your Council has again to report a satisfactory year. The papers, etc., presented at our meetings have kept up the standard reached by previous work. Our gain in members has exceeded our losses by resignations, etc., nine new members having joined the Branch since the last annual meeting. The average attendance at the monthly meetings has exceeded all previous records, and our financial position remains sound. The invitation to hold the next Australasian Medical Congress in Adelaide in 1905 has been accepted, and all the work that this will entail has been handed over to an executive committee, which will be representative of the profession in the State. We sincerely mourn the loss of our highly esteemed past president, etc., Dr. E. W. Way, and also Drs. Esau and MacLachlan, both old members, who have died since the last annual meeting. As in past years, our thanks are again due to the University Council for the use of rooms for holding all our meetings.

The following papers have been read during the year:—Dr. Gault: "The Open-Air Treatment of Phthisis" (June, 1901); Prof. Watson: "Gunshot Injuries to Nerves and Blood-vessels"; Dr. Marten: "Treatment of Tubercular Peritonitis"; Dr. J. C. Verco: "Suppuration of Knee-joint during Pneumonia"; Dr. W. A. Verco: "Case of Henoch's Purpura"; Dr. R. W. Stewart: "Cases of Cerebro-spinal Meningitis"; Dr. Hampden Carr: "Cases of Cerebro-spinal Meningitis"; Dr. Brummit: "Poison-

ing by Mercuric Binioidide"; Dr. Brummit: "Feeding in Enteric Fever"; Dr. Poulton: "Notes on some Abdominal Surgical Cases"; Dr. Marten: "Cases of Gastric Fistula"; Dr. C. H. Souter: "Stereography in Medical and Surgical Work"; Dr. Jay: "Pregnancy in a Double Uterus"; Dr. Cudmore: "An Unusual Case of Ascites"; Dr. A. A. Hamilton: "Case of Ulcerative Endocarditis."

The statement of receipts and expenditure for year ending June 30th, 1902, was as follows:—

Dr.	£	s.	d.
To Balance in Bank, June 17th, 1901	238	3	7
" Interest	4	18	10
" Subscriptions	233	2	0
	2476	4	5

Cr.	£	s.	d.
By Subscriptions to B.M.A.	180	17	6
" " A.M.G.	78	8	4
" Exchange	1	15	3
" Address to Duke of York	5	5	0
" Printing and Stationery	11	1	6
" Clerical Assistance to Hon. Sec., and Postage	9	9	6
" Gratuities to Porters	1	10	0
" Funeral Wreath	1	1	0
" Balance in Bank	236	16	2
	2476	4	5

LIABILITIES.	£	s.	d.
Subscriptions to B.M.A.	127	1	0
" " A.M.G.	53	0	0
Expenses for ensuing half-year	10	0	0
	2190	1	0

ASSETS.	£	s.	d.
Balance in Bank	236	16	2
Outstanding Subscriptions	86	2	0
	2332	18	2

Election of Council.—The following members were elected:—For vice-president, Dr. M. Jay; for hon. treasurer, Dr. W. T. Hayward; for hon. secretary, Dr. J. B. Gunson; for ordinary members of Council (3), Drs. Borthwick, Harrold, and Smeaton. These members with the new president (Dr. Archibald A. Hamilton) and the ex-president (Dr. Todd) constitute the new Council. The Parliamentary Bills Committee was re-elected, as was also the hon. auditor (Dr. A. E. Wigg). The appointment of a local editor of the *A.M. Gazette* was left to the Council.

The retiring PRESIDENT (Dr. Todd) then read his address, after which the new PRESIDENT (Dr. A. A. Hamilton) took the chair, and briefly thanked members for the honour conferred upon him.

Votes of thanks to the retiring officers and to the Council of the University ended the meeting.

The annual medical dinner was held in the evening, and as usual was a great success.

The usual monthly meeting was held at the University on July 31st last. Present: Dr. A. A. Hamilton (president) and 32 members.

Visitors.—Drs. Weld, Snow, and White.

Exhibits were shown by Drs. Poulton, Cavenagh-Mainwaring, London, and Reissmann.

PROF. WATSON exhibited the following specimens:—

1. Myxo-sarcoma, the size of a walnut, removed from the corpus cavernosum of a man *et. 45* who was discharged to duty on the eighth day. He was re-admitted the following morning on account of hæmorrhage due to indiscretion. Dr. CUDMORE.

2. Lipoma arborescens of the synovial membrane removed from a nullipara, *et.* 24, who first noticed a painless swelling in her right knee four years previously.
Dr. ANGAS JOHNSON.

3. Hypertrophied uterus from a two-para, *et.* 35, who suffered from metrorrhagia for four years. At the end of three years her tubes and ovaries were removed by one surgeon, and, finally, the uterus itself by another about a year later. Subsequent section of the specimen disclosed a submucous polyp as big as a walnut, which had caused all her trouble and which fully explained the expulsien-hypertrophy of the uterine walls and the removal of the uterus as an ordinary fibroma.
Dr. J. A. G. HAMILTON.

4. Myoma of uterus, weighing 22 lb., removed from a sterile married woman, *et.* 40. It completely blocked the pelvis, and was cemented to the rectum by a cake of cicatricial tissue formed around an embedded fishbone. The rectum was laid open, and closed transversely by a line of four catgut sutures. The bowels were kept confined for a week, after which olive oil was administered with good effect. There never was any vomiting or distention.
Dr. J. A. G. HAMILTON.

5. Myomatous uterus, weighing 9 lb., from a bed-ridden maiden lady, *et.* 57, who had awaited the menopause in vain, and only regained her health after its removal.
Dr. V. PLUMMER.

6. Myomatous uterus, weighing 2 lb., from a sterile married woman, *et.* 35. A lighting up of old tubercular peritonitis called for immediate operation (apart from the presence of the myoma). Peritoneal cysts containing soft cheesy matter, multicystic ovaries and matted tubes in active suppuration, together with a large collection of recent pus roofed in by the mesentery, rendered an operation futile, which, had it been performed earlier, might have saved her life. She succumbed the next day.
Dr. LENDON.

Dr. J. A. G. HAMILTON remarked that the above cases tended to demonstrate the folly of waiting for the menopause as too often advised.

Minutes were taken as read and signed.

Correspondence.—Letter read from the Hon. J. L. Parsons. After discussion it was decided that a deputation of three wait on the Hon. Mr. Parsons and explain to him the attitude of the meeting towards the various clauses in the Dental Bill now before Parliament.

A vote of thanks to the late president and officers of the council was passed, on the motion of Drs. A. A. and J. A. G. HAMILTON; and it was decided to place in the minutes the appreciation of the Branch of the manner in which Dr. Todd (ex-president) carried out his duties.

Dr. VERCO then read his paper on "Appendicitis" (see p. 397), and Dr. F. MAGAREY also read one on "Two Unusual Cerebral Cases."

The discussion on both these papers was held over until next meeting.

TRAINED MALE NURSE seeks engagement in mental or ordinary medical cases. Has had considerable experience in mental nursing, massage, etc., and is accustomed to travelling with patients to Europe and in the Australasian States. Unexceptional testimonials. References kindly permitted to Drs. F. N. Manning, Jarvie Hood, W. E. Warren, T. S. Dixon.

Address: R. T. O'NEILL, 68 Crown Street, near William St. (Late 17 Leicester St., Sydney.)

CORRESPONDENCE.

London.

(FROM OUR OWN CORRESPONDENT.)

The London School of Tropical Medicine—Post-Graduate Instruction in London—The University of London—The Paris Hospitals—The Present State of the Profession in Germany—The Treatment of Ozena—Lady Graduates in Italy—Professor Virchow—The Diagnosis of Malaria.

WHEN the London School of Tropical Medicine was instituted in 1899 at the Albert Docks Hospital of the Seamen's Society, it was anticipated that resident accommodation for 12 students would prove sufficient for the immediate wants of the new undertaking. In the very first session, however, the accommodation proved insufficient to meet the demand, and ever since the number of students seeking admission has been progressively on the increase. The committee of management of the Seamen's Society was thus forced to consider how best to meet the circumstances of the case. Mr. Chamberlain, on being consulted, pointed out that, as he had assisted the school in obtaining £20,000 from London benefactors, the time had arrived when some efforts should be made to obtain financial assistance from those more directly interested in the development of tropical medicine than the people of London. It was, therefore, decided that someone should undertake a mission among the residents of the East on behalf of the school, and Sir Francis Lovell was appointed to carry out the scheme. He commenced his tour of scientific evangelisation some months ago, and has already visited various places, where he has so successfully pleaded his cause that in Bombay he has been rewarded with donations amounting to 125,000 rupees, and in Singapore and Ceylon handsome annual contributions to the school have been promised for five years. This is, doubtless, only the first fruits of Sir Francis Lovell's labours, and it may be confidently anticipated that by the time he returns to England he will have succeeded in enriching the coffers of the London Tropical School to such an extent as will justify it in carrying out the structural additions to its present buildings, which are absolutely essential if it is to carry out efficiently the good work on which it has embarked.

With a view to extending the scope of its usefulness, the Association of Metropolitan Schools of Medicine, whose office is at the Examination Hall, Victoria Embankment, has invited all the institutions which are recognised by the London University as places of medical education to join in the work which the Association was established some years ago to carry out. It is also intended to organise the special departments of the general hospitals so as to provide for clinical lectures and demonstrations. There is ample room for a well-arranged scheme of clinical study for qualified medical men, and a post-graduate organisation complementary to the undergraduate teaching of the University will prove a valuable addition to the facilities already afforded in this direction by the London Polyclinic.

Some important alterations have been made in the matriculation examination of this University. In future Latin becomes an optional subject, and though for certain reasons this is a commendable innovation, it remains to be seen whether the value of the matriculation certificate will not be impaired so far as the learned professions are concerned. The subject of English history has been curtailed, and will in future be dealt

with in one paper of three hours instead of in two papers of a like duration. Elementary science has been broken up into several optional subjects; for example, mechanics, electricity, chemistry, light, sound, etc. Some new subjects are introduced, notably logic, history (ancient and modern), advanced mathematics, geometrical and mechanical drawing, and general geography. On May 4th, which was Presentation Day, the new Chancellor, the Earl of Rosebery, took his seat for the first time. His Lordship was received with warm enthusiasm, and in thanking the audience for the hearty manner in which it had expressed its satisfaction at his election said that though glad to be the first Chancellor elected by the graduates under the new Act of Parliament, he could not help feeling how unworthy he was to fill the chair which had been occupied by so many illustrious men. He afterwards distributed the prizes, and conferred the degrees obtained during the year. In almost every faculty several of the graduates were women.

For some years past the question of the reorganisation of the Paris hospitals has been under consideration. Financial difficulties have stood in the way of undertaking the destruction and reconstruction of many institutions whose present arrangements are far from being in accordance with modern sanitary requirements. It has been estimated by the Municipal Council that to complete the three Children's Hospitals now in process of erection, and to build nine new hospitals in place of existing old ones which ought to be destroyed, would involve an expenditure of something like 105,000,000 francs. M. Lefevre has brought forward a scheme which proposes to rebuild on the sites they now occupy the Pitié, Cochin, Ricord, Broca, and Broussais Hospitals, as well as to rebuild one of the contagious and three general hospitals at a cost of 75,000,000 francs. This plan received the approval of the Municipal Council, but was ultimately rejected on account of the cost. M. Lefevre's proposal has been recently modified, and bids fair to be ultimately accepted. Under its provisions nearly 2000 new beds will be established, and of this number 1200 will be purely hospital beds.

According to an article recently published in the *Ärztliche Central Anzeiger*, it appears that in 1880 there was one doctor in Germany for every 3400 inhabitants, in 1900 one for every 2000, and that in all probability by 1906 the proportion will be reduced to something like one to every 1850. At the present moment the total number of practising physicians amounts to 28,500, and it is pretty certain that more than one-half of this sum total earn less than £150 a year. While from 1887 to 1896 the increase of the population throughout Germany amounted to 116 per cent., the number of doctors during a like period augmented by close upon 64 per cent. If this statement is even approximately correct, the outlook for the average practitioner in the Fatherland can hardly be called encouraging.

An interesting communication has recently been made by Signor Dionisio relating his experience in the treatment of six cases of ozæna by incandescent electric light. The light is directed by reflectors, or introduced by lamps, into the nostrils. In each of the six cases referred to the characteristic fœtor has disappeared, and there has been a marked decrease in the amount of crust and secretion. Dionisio admits that it is yet too soon to speak confidently of the permanency of the improvement he has thus achieved; but present methods of treatment in this distressing malady are so disappointing and unsatisfactory that any plan offering better results than those heretofore attained is worthy of due consideration and of tentative adoption.

The Universities of Italy between the years 1877 and 1900 conferred degrees of one kind or another on no fewer than 257 women; 24 of these were in medicine and surgery, 6 in law, 140 in arts, 37 in philosophy, 20 in mathematics, and 30 in physics and chemistry. The increasing popularity of a scholastic training for women is evidenced by the fact that whereas in 1893 the number of female students on the books of the various universities was 98, in 1900 it was over 250.

Professor Virchow's recovery from his recent severe accident has been highly satisfactory. He has left Berlin for the country, where it is his intention to reside for some months to come. His three principal assistants will carry on his classes at the University during the summer term. He has resigned the presidency of the Berlin Medical Society, and it seems likely that his successor will be Professor von Bergmann.

At a recent meeting of the Medical Society of London, Dr. Patrick Manson, the Fothergillian Medallist, read a paper on the importance of a correct diagnosis in malarial affections. He pointed out that clinically there are many signs and symptoms which justifiably lead to a suspicion of malaria, but that periodicity is the only one which warrants a positive diagnosis. The periodicity is invariably either tertian or quartan, and gives rise to a rhythmical recurrence every 48 or 72 hours of symptoms which are dependent upon parasites whose habits are either tertian or quartan. Quotidian periodicity is valueless, and to make it a ground for diagnosis is not only wrong and dangerous, but is the commonest cause of erroneous conclusions. Multiple infection by two kinds of parasites, or by two or three generations of the same series of parasite, may give rise to double tertian or treble quartan infection, with diurnal recurrence of symptoms, but pathologically this is not a true quotidian periodicity. A similar daily periodicity is common in almost all febrile complaints. Splenic and spleno-medullary leucocythæmia, in which the spleen is enlarged, have often marked quotidian fever, but such cases are in no sense malarial, and the idea that they may be so is only entertained if the patients happen to have resided abroad. Similarly septic absorption of pent-up pus is a well-recognised cause of quotidian fever, and, again, if such absorption occurs in a person who has resided abroad in a malarious country, the conclusion is often abruptly arrived at that he is suffering from malaria. In cases of doubt the value of quinine as a therapeutic aid to diagnosis should never be omitted. In doses of ten grains three times a day it never fails within from 48 to 96 hours to arrest a malarial attack occurring in this country. Besides the clinical and therapeutic tests there remains yet another, which is the most satisfactory of all provided it is undertaken by an expert—the microscopical. In stained films, or in fresh blood, it is practically always possible to find the parasite unless quinine has been recently administered. But, in addition to the presence of the parasites there is a marked leucocytic variation in the blood, especially during the remissions of temperature, which is of conspicuous diagnostic importance. This variation consists in a relative increase in the large mononuclear cells to about 12 per cent. or more. The increase seems to be independent of the species of parasite, and is maintained for a period varying from two or three weeks to as many months. It is not affected by the administration of quinine, and is of higher value as a test of recent malaria than splenic tenderness or enlargement. It is a particularly useful test in cases where, either in the natural course of events, or after the administration of quinine, there are no characteristic symptoms. Assistance is sometimes got in arriving at a diagnosis from considerations of time and locality. It is commonly believed that malarial

infection may last a lifetime, but Dr. Manson's experience leads him to arrive at the important conclusion that it does not persist more than three years from the date of invasion, provided, of course, the patient does not become reinfected. Of all the patients coming from the fen districts and other formerly malarious localities in England, supposed to be suffering from malaria, because of the periodicity of their symptoms—sometimes accompanied by an enlarged spleen—not one of those investigated by Manson turned out to be true malaria. "I have never," he says, "seen a case of indigenous English malaria. I believe the plasmodium has died out of England like the wolf and the wild boar." The importance of this strong statement has surely a hopeful bearing on the efforts now being made for the diminution of the disease in those countries where it is still a veritable scourge. In concluding his remarkable paper, Dr. Manson strongly emphasised the diagnostic value of the three classical tests mentioned—the clinical-tertian and quartan periodicity; the therapeutic, the curative effect of quinine; and the microscopical, the detection of the parasite or its products in the blood, and the characteristic leucocytic variation.

Victoria.

(FROM OUR OWN CORRESPONDENT.)

The Administration of Anæsthetics—Victorian Trained Nurses' Association—Infectious Diseases Hospital—The Women's Hospital, Melbourne—The Alfred Hospital.

SINCE my last letter the principal topic of interest amongst medical men has been the administration of anæsthetics, and the position taken up by the newly-appointed district coroner, Mr. R. Cole, M.B., LL.B., towards the profession. An inquest was held by him recently on the body of a child, *et. 7*, who died under chloroform while undergoing an operation. The coroner was reputed to have said that deaths from chloroform were much too common, and that it was necessary to make the strictest inquiry into the methods of medical men in the administration of chloroform. He also said that the fact of a man being a medical man was not sufficient to authorise him to administer chloroform unless he was skilled in its administration. Mr. C. Griffiths, M.R.C.S., was practically treated as a criminal, and warned by the coroner that he need not give evidence unless he liked, as, if he did, it would be used against him. He was cross-examined as to where he had learned the administration of chloroform, which proved to be at St. Bartholomew's Hospital, London, and he was also asked what experience he had gained in the administration of anæsthetics; altogether he was subjected to a most unpleasant experience, which cannot have been conducive to his professional status or to his practice. Mr. Eadie, M.B., gave evidence that the child had been suffering from hydatids in the liver, and that during an operation to remove them the child died. Mr. C. H. Mollison, M.R.C.S., who made the post-mortem examination, stated that death was due to failure of the heart and respiration while under chloroform. It was further stated in evidence that the ordinary mask was used, and the greatest care taken by Mr. Griffiths in putting the child off, and that it was fully 20 minutes before the operator inserted an exploratory needle, and immediately it was withdrawn Mr. Griffiths said the child had stopped breathing. Everything was done to revive the child, but without avail. The jury

found that death was due to "chloroform poisoning," and that no blame was due to the medical man who administered the anæsthetic.

The first question that a medical man will ask himself in Victoria if he is called upon to give an anæsthetic in any dangerous case is, "What is my position? and am I justified in taking the risk of being cautioned like a criminal for doing my duty, and of being arraigned on a charge of manslaughter?" Then, again, he might ask himself, "What will my patients think of me after being badgered by a coroner with questions as to my professional ability? and if I happen to be only starting in life, probably sneered at as incompetent. Again, if the jury bring in a verdict of death from chloroform poisoning, none of my patients will ever allow me to administer an anæsthetic to them; in fact, part of my reputation as a medical practitioner will be gone." This is a very serious condition of things for the whole profession, and has caused wholesale consternation amongst all classes of practitioners.

The Victorian Trained Nurses' Association is now *un fait accompli*. The Association has registered 500 Victorian nurses, a curriculum of study (accepted by all training schools) has been passed, and all metropolitan and nearly all country general hospitals have been registered as future training schools. It has appointed a conjoint board of examiners, who will conduct the final nursing examinations, has limited the training of probationers to general hospitals, and in future will register as special only those who have been registered already as general nurses. Reciprocity has been established between the Australasian Trained Nurses' Association. There can be little doubt that the Victorian Trained Nurses' Association will elevate the professional status of nurses and be a great boon to all concerned in its welfare.

The practical completion of the Infectious Diseases Hospital at Fairfield was formally reported to the City Council by the Health Committee. The cost of building this hospital has been £23,000, or more than £500 per bed; and Dr. Gresswell estimated the cost of maintenance of 44 beds at £6000 per annum. This only provided for treatment of scarlet fever, typhoid, and diphtheria. The scheme for maintenance provided for joint support from the Government and the municipalities, but ways and means are still under discussion. But it is sincerely to be hoped that this hospital will be ready and in full working order about the time of the millennium!

Affairs remain unchanged in connection with the Women's Hospital. Dr. Martell sent in her resignation a fortnight ago, but still continues to carry on the duties of resident surgeon, with the hope that the committee will be able to find some medical man to relieve her. The junior members of the profession give the hospital a wide berth by not applying for the vacant position, although tempted by the offer of £250 per annum. The general opinion now expressed is that the committee should publicly acknowledge they made a mistake in closing the hospital, and express regret at the summary dismissal of the late resident surgeons. The late residents, on the other hand, would be quite willing to apologise for their personalities, etc., etc. Dr. E. W. Anderson, out-patient surgeon, applied for one month's leave of absence, owing to ill-health, and the committee appointed Dr. Spowers to fill the vacancy on August 1st. Dr. Cuscaden brought under the notice of the committee the fact that they had slighted the obstetric staff by passing them over and appointing a young medical gentleman, and one who was not on the staff, to the position. He considered this a dangerous precedent to establish, and pointed out to the committee that the usual custom adopted at all hos-

pitals was to appoint the next senior to such position. The committee expressed regret at unknowingly having offended the obstetric staff in making the appointment, and resolved that in future such appointments would be made from the obstetric staff.

The managers of the Alfred Hospital have lately been considering the rules regarding the appointment and tenure of the honorary staff of the institution. After some months investigation, they have drawn up a new set of rules, which the subscribers will be shortly invited to adopt. Briefly, these rules require that for any future surgical appointment a candidate must be either an M.S. or F.R.C.S., and for any medical appointment an M.D. or M.R.C.P.; surgeons to retire at 60 years of age, and physicians at 65. The members of the present honorary staff do not think it wise in our small community to so lessen the field of choice for the appointments. They have pointed out to the managers their ideas in the matter, but without avail. It seems after all quite unnecessary to so limit the field, for if the managers who do the appointing wish for an F.R.C.S. and one offers, they can surely elect him in preference to all others. Lay members of committee can rarely, however, be made to see wisdom. It would probably be an advantage for all the hospitals if at least half of the members of the committee consisted of representatives of the honorary staff.

THE BATTLE OF THE CLUBS.

Victoria.

COURT FRIAR TUCK, A.O.F., AND ITS SURGEONS.

COURT FRIAR TUCK, an Ancient Order of Foresters' Lodge in Fitzroy, notified its surgeons that they intended to reduce the remuneration from 15s to 13s per annum. They had been paying 15s for years, but lumping, as they do, the management and medical expenses in one fund, they determined to make up for their launching out into increased general expenses by cutting down their surgeon's rate. They bolstered up their case by quoting a long list of lodges paying 12s, 12s 6d, and 13s, and carefully suppressed the names of lodges paying 14s and 15s in the district. A branch meeting of the practitioners in the districts of Fitzroy, Clifton Hill, Collingwood, and Carlton was held, and it was unanimously decided to hold out for the 15s. All the practitioners in the Medical Defence Association District Branch were either present or interviewed, and all agreed to hold out for 15s.

Dr. Lynch was seen by four different practitioners on four different occasions, and specially promised, first, that he would not apply at all; and, then, that he would not apply at less than 15s. The Court cancelled their surgeons' agreements at 15s, and called for applications at 13s. There was an interim period between the termination of the agreement and the appointment of fresh surgeons, and the Court issued a circular to its members stating that Dr. Lynch would attend to any of its members during that period.

Dr. Lynch was interviewed, and told that the other practitioners looked on this circular as being a breach of faith on his part. He replied that the circular was issued without his authority. He was asked to get it withdrawn. He said he wouldn't and couldn't.

In his defence later on he contended it was no breach of faith, as he chose to regard all the Court Friar Tuck patients as transfers through another Court he was surgeon to in the same Order, whose rate, by the way, was 13s.

Another branch meeting was held, making the fourth, and it was unanimously resolved to report Dr. Lynch's whole conduct to the Council, and request the Council to deal with him. In the meantime Dr. Lynch was appointed, together with some practitioners of the district outside the Association, at 13s, and the Court members were notified by circular of his appointment. There were two trials of Dr. Lynch held by the Council, as he objected to the first one because he only got six, instead of seven, clear days' notice of his trial. He also objected to certain members sitting, putting forward pleas of bias. The Council was determined he should have no ground of complaint on any technical scores, and complied with his wishes. He was accordingly given a second trial, after the Council had obtained legal advice as to its procedure.

The trial dragged its slow length wearily along, and Dr. Lynch submitted a formidable array of technical objections and an elaborate defence of his line of action.

In that defence there was a very subtle and what was afterwards proved to be a most treacherous point raised. He said that he discovered that the Branch had not only passed the resolutions to refuse anything less than 15s, but also a resolution that if the Court had to pay 15s, none but the previous holders were to re-apply, thereby saving them from financial loss as a result of their united stand. Dr. Lynch asseverated that he did not know of this second consequential resolution at the time he made his promises, and stated that he strongly resented the discovery, and regarded himself as absolved from his promises.

He was asked, "Who first gave him his knowledge of this second resolution, and when?" After taking advice, he gave the name of a practitioner in the district and the date.

His informant was at once telephoned for, and then and there proved to the entire satisfaction of the Council that Dr. Lynch was made aware of the second resolution before he made one of his last promises. This was the last straw; and this, the tenth or eleventh night of his trial, was the last, and the Council unanimously resolved that Dr. Lynch be "excluded" from the Association.

PARLIAMENTARY NOTES.

Witnesses' Fees at Inquests.

An Act to amend and consolidate the law relating to coroners has been introduced into the New Zealand Parliament. By clause 17 medical witnesses and other skilled persons shall be paid fees not exceeding those specified in the first schedule as the Governor-in-Council from time to time prescribes. The first schedule is headed, "Scale of fees payable to medical witnesses and other skilled persons." For making a post-mortem examination or analysis and attending to give evidence of the result, the maximum is fixed at three guineas; the fee for attending and giving evidence when not required to make a post-mortem examination is fixed at a maximum of one guinea, and in addition to the above, when the witness resides more than three miles from the place where the inquiry is held, a further fee is allowed by way of mileage one way at the rate of 1s per mile.

The Medical Practitioners Amending Bill.

The Medical Practitioners Amending Bill came on for discussion on July 15th in the New South Wales Legislative Assembly. The introducer, Mr. E. M. Clark, called attention to the fact that the Act of 1898 allowed the Medical Board to place on a separate register the name of any person not possessed of

qualifications entitling him to registration in the ordinary way who can still give proof that he has passed through a due course of study at a recognised school of medicine and surgery, and that he has practised in a reputable manner as a medical practitioner in New South Wales during five years prior to the passing of this Act. The Medical Board had interpreted the words "due course of study" as meaning three years in some recognised school. Mr. Clark stated at once that this bill was introduced in the interests of one gentleman, Mr. Hugh St. George. He had almost completed his curriculum, but not having sufficient money was compelled to relinquish his studies for the time being. The member for Wentworth had mentioned to him a case on all fours with Mr. St. George, and if that was the case he added: "The bill will probably do an act of justice to individuals in every electorate." An amendment was moved that the bill should be referred to a select committee. Mr. Norton, member for Northumberland, recalled to the memory of the House the evidence that had been given of the evils of quackery exposed by a previous select committee. The second reading was defeated by 33 votes to 24.

Hobart Infectious Diseases Hospital.

At a recent sitting of the Tasmanian Parliament Mr. Propsting moved: "That, in the opinion of this House, the Infectious Diseases Hospital, to establish which £5000 was provided by Parliament in 1899, should be erected without further delay." Through the indecision of the present Government nothing had yet been done though the vote was passed in 1899. The Minister for Lands said that Ministers had done their best, but were confronted with great difficulty owing to the objection of people to have an infectious hospital erected in their neighbourhood. The Hobart Hospital Board had now consented to the Infectious Diseases Hospital being erected in connection with the General Hospital, and the work would be proceeded with immediately, plans having already been prepared.

OBITUARY.

FREDERICK MILFORD, M.D. (Heidelberg and Sydney), L.R.C.P., M.R.C.S. (Eng.), Sydney.

With regret we record the death of Dr. F. Milford, of Sydney. To the younger generation of practitioners his figure and strong individuality of character were, perhaps, unfamiliar, but to the seniors in the profession he was known to be one who had played no small part in the medical life of the colony during the latter half of the past century. Frederick Milford came of good stock. He was the son of Mr. Justice Milford, who in the early years of the colony filled the post of Chief Judge in Equity of the Supreme Court. Our late colleague was educated partly in Sydney, and afterwards in the old country. Adopting medicine as his profession, he studied both in London and the Continent, where, indeed, he obtained the M.D. of the University of Heidelberg. He was also a member of the College of Surgeons of England, as well as a Licentiate of the College of Physicians.

In 1858 he returned to New South Wales, being then aged 24. He became a member of the staff of St. Vincent's Hospital, beginning his duties in the old building in Potts' Point, formerly the residence of Sir Charles Nicholson. It was, however, in the new hospital in Victoria-street that he spent the years between 1858 and 1885 as honorary surgeon. In that building was centred much of the interest of his life and work. In 1885 he resigned his appointment, and became con-

sulting surgeon. As an honorary surgeon he was faithful and indefatigable in the discharge of his duties, and early showed a keen enthusiasm and boldness in major operative work at a time when few of his contemporaries undertook such responsibility. This soon placed him among the foremost surgeons in the colony. In addition to his hospital work he rapidly acquired and retained one of the best practices in the city of Sydney. An original member of the N.S.W. Branch of the B.M.A., he took a keen and active part in its work and growth, and was one of its early presidents. Twenty years ago, when the Sydney Medical School was founded, Dr. Milford was appointed lecturer on surgery, and afterwards, in virtue of holding this office, he took charge of beds in Prince Alfred Hospital as honorary surgeon. To the earlier medical graduates of the Sydney University he was, therefore, well known. Some years ago he resigned these posts, and confined himself to private practice only, but to the last he was still occupied with and interested in all that pertains to our profession. Thus we may truly say that he died in harness.

In recent years he obviously failed in vigour, especially in the last few months, so that it did not come wholly as a surprise to his old friends to learn that the end had come. We understand that a long-standing cardiac lesion was the immediate cause of death.

No account of Frederick Milford would be complete without a reference to the sport with which his name is closely and honourably connected. Dr. Milford was indeed an enthusiastic yachtsman. Beginning, as an amateur sailor should, in small craft, he served an apprenticeship in dinghies, and later on sailed and raced successfully larger craft, such as the "Doris," which he took round to Melbourne, the "Sao," and, lastly, the handsome "Isa." He was a member of both yacht squadrons, but it was in connection with the Prince Alfred Yacht Club that he will be best remembered by yachting men. Of this club he was at one time commodore.

Milford was one of those rare men who apparently never learn the meaning of the word fear. In all his dealings in life this absence of fear was a leading feature of his character. Quick-tempered, quixotic, perhaps at times somewhat obstinate, he was none the less an honourable and gallant gentleman—true to his friends, true to his convictions, and extremely kind-hearted. The profession is the poorer by his death. To those of us who had the privilege of knowing him his courtly old-world manner, his strict integrity, his love of adventure, and his fearlessness made up a personality the remembrance of which we would not willingly allow to pass from our recollection.

TALBOT WESTBROOK, M.R.C.S. (Eng.).

Dr. Talbot Westbrook died in Sydney on July 26th. He was born in Tasmania, and studied medicine first at Hobart, and subsequently proceeded to Guy's Hospital, London, where he completed his course in the year 1871. He subsequently returned to Australia and commenced practice at Numurkah, Victoria, in 1890. He afterwards removed to Narrandera, New South Wales, and later to Richmond and Leichhardt. For the past two years he did not practise, owing to the precarious state of his health. The deceased leaves a widow.

Memorial to the late Lieut.-Col. Fetherston, P.M.O.—A memorial to perpetuate the memory of the late Lieut.-Colonel Fetherston, for many years principal medical officer of the Victorian military forces, was unveiled on July 26th. The memorial took the form of a drinking fountain, and it was erected at Queenscliff in accordance with a wish expressed by the late P.M.O.

REVIEW OF CURRENT MEDICAL LITERATURE.

MEDICINE.

Malignant Endocarditis.

Poynton and Paine (*Medical Press and Circular*, May 7th, 1902) read a paper before the Royal Medico-Chirurgical Society of London in April last on malignant endocarditis. The authors have been studying for some time past the pathogenesis of rheumatic fever, and have adduced strong evidence in favour of a diplococcus infection in this disease. They have studied some 30 cases of malignant endocarditis which were associated with a history of acute rheumatism, and in which, during a course of the disease, there were not infrequently active manifestations of rheumatic fever. As a result of their investigation they concluded that there was a group of cases of malignant endocarditis, rheumatic in origin. They base their conclusions on the following grounds:—1. Clinical experience of cases of this malady. 2. Pathological investigation. 3. Bacteriological experience. (a) Rheumatic fever is due to a diplococcus. (b) A diplococcus can be isolated from these cases of malignant endocarditis which will reproduce the disease in rabbits. (c) The cultural and morphological characteristics of these two diplococci resemble one another so closely as to lead to the conclusion that they are identical organisms. (d) The diplococcus rheumaticus when passed through a series of rabbits will produce malignant endocarditis indistinguishable from that produced by the diplococcus isolated from certain cases of malignant endocarditis in man. (e) The diplococcus rheumaticus may produce in a rabbit first a recoverable illness resembling rheumatic fever, and then on a second inoculation, malignant endocarditis. (f) A diplococcus, isolated from certain cases of malignant endocarditis in man, will also produce not only malignant endocarditis in rabbits, but a condition indistinguishable from rheumatic fever. (g) By these diplococci every grade of valvulitis, from simple to malignant, and *vice versa*, can be produced.

Failure of the Widal Reaction in Enteric Fever.

The value of the Widal reaction in the diagnosis of enteric fever is still *sub judice*. In the following case, reported by Wynter (*Lancet*, June, 1902), the reaction failed, though the disease was proved to be enteric fever. A well-developed, healthy-looking girl was admitted to Middlesex Hospital after 14 days' malaise. This was her first illness. She presented the characteristic symptoms of enteric fever, and as time went on the symptoms became more marked, with high temperature, weak pulse, failing circulation, evidenced by congestion of base of the lungs and a systolic murmur audible all over her cardiac area, characteristic rose-spots, enlargement of the spleen, and diarrhoea. On the tenth day after admission an ischio-rectal abscess was evacuated; it contained an ounce or more of foul pus, which yielded a pure culture of *bacillus coli communis*, but no other organisms. She went through a typical relapse, and convalescence was tardy. On the day after admission Widal's reaction was tried with 1 in 40 dilution, and again the next day with the same dilution, but there was no reaction even after 45 minutes. Two days later the *bacillus typhosus* was isolated in pure culture from the blood obtained from the median basilic vein. These cultures gave a typical cultural reaction, and were clumped by typhoid antitoxin serum at a dilution of 1 in 500. Five days later the blood

still failed to agglutinate the typhoid bacilli in a dilution of 1 in 40. Eleven days later there was still no reaction. Thirteen days after the last report there was a feeble Widal reaction.

Hæmatoporphyrinuria.

Since the introduction of sulphonal as a hypnotic some 100 cases of sulphonal poisoning have been reported. In the majority of instances the passage of very dark, or of abnormally pigmented urine, has been considered sufficient evidence of the existence of hæmatoporphyrinuria, and in only a few instances has hæmatoporphyrin been isolated from the urine, and chemically identified. Tyson and Crofton (*Philadelphia Medical Journal*, May 17th, 1902) report a case of this nature. A widow, aged 50 years, had been taking from 20 to 60 grains of sulphonal every night for seven years. Her children stated that they had observed no symptoms of failing strength, though they were aware that for some months she had passed urine of an unusually dark colour. One day she sent for her medical attendant, complaining of very severe pain across the upper part of the abdomen, so severe as to require hypodermic injections of morphia to subdue it. The bowels were not satisfactorily relieved, and the abdomen became markedly tympanitic, and assumed a hemispherical shape, resembling advanced pregnancy. When seen by the writers she was in bed with a dry tongue, was in a condition of stupor, but still could be easily aroused, and would carry on a conversation about herself. Her pulse was full 106, and respiration somewhat hurried. The normal liver dulness was obscured by extreme tympany. The urine was of a port-wine red colour, and contained a trace of albumen, and a small number of pale granular and epithelial casts. Hæmatoporphyrinuria was diagnosed, and the administration of sulphonal immediately stopped. Four specimens of urine were analysed, representing the total quantity voided in 24 hours on the four days after the drug was stopped. The quantities voided and the specific gravities were normal. The reaction was slightly acid in all four specimens. The first specimen was of a dark port-wine red colour, the second was not quite so dark, the third was light red, and the fourth was normal in colour. The first two specimens contained traces of albumen and a small number of pale granular, hyaline and epithelial casts. The second two contained no albumen. None of the samples contained bile-pigment, bile-acids, urobilin, indican or sugar. Hæmoglobin or other derivatives of hæmoglobin, excepting hæmatoporphyrin, were undetected. Hæmatoporphyrin was detected by the following tests:—Barium mixture, consisting of one part of saturated nitrate of barium solution and two parts of concentrated baryta water is added to this specimen of urine: a precipitate forms, containing the bulk of the hæmatoporphyrin and of other pigment which may be contained in the urine. The barium precipitate is filtered off, washed and extracted with dilute hydrochloric acid alcohol. If hæmatoporphyrin is present, the extract will be of a reddish or pinkish hue and will show fluorescence; if heated in a water bath the alcoholic solution will turn much darker. On spectroscopic examination of the solution, a narrow absorption band between C and D in the yellow, and a second broader band between D and E, between the yellow and the green, will be seen. If the solution is made alkaline four absorption bands will appear, one between C and D, two between D and E, and a fourth very dark band between B and F, that is between the green and the blue of the spectrum. A quantitative examination of the amount of hæmatoporphyrin in the urine was made, and from this it was estimated that about one-seven-

teenth of the hæmoglobin in the blood was destroyed and wasted in the urine during 24 hours in the form of hæmatoporphyrin. Such a loss of blood pigment continued for a long period of time must lead to severe degrees of anemia. In this case the sulphonal was stopped in good time, and the patient recovered.

"Idiopathic" Hereditary and Family Hæmaturia.

L. Guthrie (*Lancet*, May 3rd, 1902) describes some cases of Hæmaturia under his own observation, and refers to others reported by Attlee (*St. Bartholomew's Hospital Journal*, December, 1901), which he considers to be "idiopathic" and hereditary. The characteristics of this disease are thus summarised:—1. It is hereditary, familial, and congenital. 2. The hæmaturia may persist for many years, but vary in extent. It may cease for a time, but is apt to recur or to increase in paroxysmal attacks. The blood may appear as blood to the naked eye, or may be found on microscopical examination. It is not "smoky" but "red," the colour being due to oxyhæmoglobin and not met hæmoglobin. Normal red blood corpuscles and blood casts can always be found under the microscope, the latter showing that the hæmorrhage must take place from the substance and not from the pelvis of the kidney. The amount of blood is much greater than that usually seen in nephritis, and resembles in its profuseness the blood passed in cases of renal calculus or new growths. 3. All cases are liable to paroxysmal exacerbations of hæmaturia, accompanied by slight pyrexia, malaise, headache, vomiting, and slight pains in the back and limbs. These exacerbations recur at no regular intervals, at times appear to result from "catching cold," or from the use of some fruits, or from the extremes of hot or cold weather. They occur with extreme suddenness, and are not influenced by postures. 4. There are no œdema, ascites, or cardio-vascular changes, and the temporary anemia after an exacerbation is not profound or lasting. 5. The hæmorrhage is not due to the presence of crystalline deposits such as uric acid or oxalates. 6. The quantity of urine and its specific gravity are normal; the amount of urea is normal. The urine is nearly always albuminous, the albumin varying from one-twentieth to one-fourth of its bulk. Sometimes it is in accordance with the amount of blood present; at others it exceeds it. Nucleo-albumin is usually passed as well. 7. None of the subjects of this disease is a "bleeder." None of them suffers from Raynaud's disease nor purpura: and calculus, new growth, congenital syphilis, renal tuberculosis, and all forms of nephritis can be excluded. The author remarked that these ordinary causes of renal hæmorrhage can be excluded on the ground that the hæmaturia is congenital, or, at all events, is noticed shortly after birth. He suggests that there is some inherent weakness or varicosity of the walls of the renal vessels leading to what has been called "renal hæmophilia," or "renal epistaxis"; or the vaso-motor system may be at fault (angio-neurosis), in which case the complaint might be grouped with cyclical or postural albuminuria. The prognosis must be guarded, though the disease does not seem to endanger life, or even health, as a general rule.

Pleural Effusion associated with Heart Disease.

Barrie (*La Semaine Médicale*, January 22nd, 1902) states that the differential diagnosis between hydrothorax and pleurisy can be made by remembering that a true pleural effusion is unilateral, and selects by preference the right side, and though smaller in amount is more likely to cause dyspnoea. Hydrothorax is generally

bilateral, and accompanied by signs of severe organic disease. The pleura is practically unaltered, while in pleurisy it is inflamed. Chemical examination of the fluid from the two conditions is important; that of hydrothorax is simply serous, while that of pleurisy is inflammatory in nature, and contains fibrin. On cytological examination the fluid from hydrothorax is found to contain desquamated epithelial cells from the pleura, while that from a cardiac pleurisy contains poly-nuclear cells with epithelial elements. When the examination has determined that the condition is one of pleurisy and not hydrothorax, the diagnosis is not determined, for the effusion may follow an intercurrent attack of acute rheumatism. The pleurisy which complicates rheumatism is as a rule sudden in onset, and soon becomes bilateral. Its cause is usually the toxic influence, which may also exert its influence on the endocardium. The prognosis of the pleurisy is by no means so serious as that of the hydrothorax, and in the treatment of the latter it is necessary to remember that it must be directed toward the underlying astylosia.

The Prognosis of Pleural Effusion.

At the meeting of the Association of American Physicians held in May last, Richard Cabot read a paper on this subject (*Philadelphia Medical Journal*, May 17th, 1902). He has studied the subsequent histories of 300 cases of serous pleuritis, in all of which tapping has been performed. In none of them was there any evidence of tuberculosis at the time of tapping. He has been able to follow 152 cases; of these 21 were in sound health from 15 to 21 years later; 23 were in sound health 10 to 15 years later; 36 were in good health 5 to 10 years later, making a total of 80 cases. At the end of four years 14 were in sound health; at the end of three years, 7; and at the end of two years, 16, making a total of 37. Twenty-three patients developed tuberculosis after the pleurisy, and 24 died of other disease. Eighty per cent. of cases of uncomplicated pleurisy have remained well for five years or more. Demonstrable tuberculosis developed later in 15 per cent. of these. The type of tuberculosis found in these cases was mild and of slow course, although rapid tuberculosis sometimes occurred. Of the patients who remained well after five years or more, only 25 per cent. had a tuberculous family history. Nearly 66 per cent. of those who subsequently developed tuberculosis had a tuberculous family history. The author considers that the prognosis of pleurisy with effusion is good, provided there be no family history of tuberculosis. In the discussion which followed this paper, Thomas Harris, of Manchester, England, said that in England the statistics were more unfavourable than those given by Cabot, and that the effect of pleurisy is regarded very seriously by the large insurance companies. Jacobi, of New York, said that patients of advanced years frequently presented remnants of old pleurisy at autopsy without clinical evidence during life, and this fact would seem to indicate that the prognosis was not so unfavourable as was formerly supposed. Cabot himself had found out of 1,000 autopsies that 25 per cent. of the subjects had pleural lesions without clinical history of an attack of pleurisy.

PÆDIATRICS.

Tubercle Bacilli in the Nail Dirt of Children.

Preisich and Schutz report the examination of the nail dirt of 66 children with a view to demonstrating the presence of the tubercle bacilli in it. This was successfully done in 14 cases, or 21.2 per cent. The children were taken promiscuously, without respect to their living in tuberculous surroundings. Of the 14 cases in which the bacilli were found, 9 gave an

hereditary history of tuberculosis. In all cases in which an hereditary history of bone tuberculosis was present tubercle bacilli were found. The method used for demonstrating the presence of these organisms was that usually employed in stained preparations. At first animal inoculation was tried, but it was found that very frequently the animal died quickly of some acute infection. This work demonstrates the importance of the nail dirt of children in the spread of tuberculosis.

Osteoarthritis of the Hip in Children.

Nove-Jossierand (*Rev. Mens. des Maladies de L'Enfance*, January, 1902) reports the case of a girl aged six years, who had complained of lameness on the right side for a year. There was no pain and no functional disorder. The lameness remained stationary for eight or nine months, during which time the child walked and played about as usual. Then the lameness showed a tendency to increase, and on examination it was found that there was slight atrophy of the right thigh, and the child had a tendency to hold the limb in the position of adduction and internal rotation. The movements of the joint were free, except that adduction and external rotation were somewhat limited. Pressure over the trochanter produced slight pain referred to the knee, but pressure directly applied to the hip, knee, or foot was not painful. Under the influence of fatigue the limp increased, and there was some pain. A radiograph showed a thickening of the portion of the ilium forming the acetabulum. The bone was increased in volume, its external surface was deformed, and the line between the head of the femur and the margin of the acetabulum was obscured; in the centre of the joint the bone appeared rarefied. The upper extremity of the femur showed no distinct change. The child was kept in bed for several months with continuous extension and a suitable splint, and the pains disappeared, and the movements of the hip quickly returned to normal, though the limp still persisted at the end of six months of this treatment. Later the limp disappeared, and there were no subjective or objective symptoms of joint disease, except that a second radiograph showed that the lesions seen at first were better marked, and that the upper extremity of the femur appeared to be involved in the disease. After the child had been allowed to walk about for some months all symptoms, including the limp, disappeared, and a third radiograph showed complete restoration of the joint, except for a slight hyperostosis in the infra-acetabular region and a slight increase in the thickness of the head of the femur. The author considers this case to be a special variety of osteoarthritis.

Spontaneous Hæmorrhages in Children.

At the meeting of the American Medical Association in June last, Abt, of Chicago, read a paper on this subject (*Medical Record*, June 21st, 1902). Hæmorrhage may occur underneath the skin into the serous cavities or into the mucous membranes. A series of ten cases was reported, one of which was directly traceable to congenital syphilis. The old hypothesis of Landau was that these cases were the result of embolism, but this theory seemed no longer tenable. Numerous micro-organisms had been found associated with these cases, and in two of the author's cases there was clear evidence of pus infection, and in several others there was plainly a colon infection. The author considered it very improbable that the condition was due to any one specific organism, the hæmorrhage being probably the result of several infections. No changes in the morphology or chemistry of the blood had been detected. In most cases there was only a slow oozing, though exceptionally a

profuse bleeding had occurred at intervals. In several cases ecchymotic spots were observed on the soft palate. Hæmorrhage from the umbilicus occurred in three cases, under the skin in six, from the nose in four, from the mouth in seven, from the stomach in two, from the vagina in two, from the bowel in five, and from the ear in one. The blood from the stomach was bright red, that from the bowel was dark and sometimes clotted. The temperature varied considerably, and as a rule it remained elevated throughout the whole course of the disease. In one case it was subnormal. Icterus was observed in several cases, and convulsions and muscular twitchings in one. The evacuations from the bowel were very offensive before the commencement of the hæmorrhage. No internal remedy, not even supra-renal extract, had any apparent effect on the disease, and the local use of styptics and of supra-renal extract was without benefit. The external use of gelatine in one case had given some encouragement, and the author strongly recommended the local use and the internal administration of this drug.

Multiple Arthritis in a Child suffering from Gonorrhœa.

Acker (*Archives of Pediatrics*, February, 1902) reports the case of a girl of two years who had a profuse vaginal discharge in which gonococci were found. When the legs were handled they appeared to be painful, but there was no swelling. A few days later the ankles and knees were found to be markedly swollen and painful, and the temperature reached 103.4. The urine contained a trace of albumin with many epithelial cells and leucocytes, but no casts. The child was treated with five grains of sodium salicylate, with warm douches of boric acid, and inunctions of two per cent. ichthyol ointment twice daily. The child recovered completely.

Arthritis accompanying Ophthalmia Neonatorum.

Hawthorne (*Lancet*, May 31st, 1902) records the case of a child in whom purulent ophthalmia commenced two days after birth and lasted for three weeks. When the child was fourteen days old the right shoulder joint became considerably, and the right wrist slightly swollen, without apparently causing him much discomfort, and the swelling subsided in the course of a fortnight without any very active treatment. When six weeks old the child came under the author's care. He then had a slight amount of muco-purulent discharge from the conjunctiva. The joints which were first attacked—that is, the right shoulder and wrist—had completely regained their normal characters; the left elbow joint was now much enlarged, and the swelling extended down the radial side of the forearm for a considerable distance, giving here the sensation of deep fluctuation, as though the sheaths of the tendons were involved. The skin was not reddened, and though he objected to manipulation of the joint, he appeared to be otherwise free from pain, and his general nutrition was satisfactory. The limb was fixed, the local treatment of the ophthalmia was continued, and in two or three weeks the elbow-joint and forearm had regained their normal condition. In 1885 Clement Lucas called attention to the fact that the purulent ophthalmia of newly-born infants may be associated with joint complications analogous to those which frequently attend urethritis, and he recognised that two varieties of arthritis may be associated with ophthalmia, viz.: (1) A very acute form with features suggesting a tendency to suppuration, and (2) a milder form accompanied by a great deal of effusion and pain on movement, but with little or no surface redness. A feature of interest in this case is the

extension of the swelling beyond the limits of the joint cavity. This is a well-recognised event in many cases of arthritis of urethral origin; and Stephenson has drawn attention to "effusion into the sheath of the tendons" in the neighbourhood of the affected joints in cases where the primary gonococcal inflammation involves the conjunctiva. The promptness and the completeness of the restoration of the joints to normal may be noted as a contrast to the obstinate and often prolonged evil effects which so frequently attend the usual form of gonorrhoeal arthritis.

PATHOLOGY.

Tuberculosis and Amyloid Degeneration.

Zahn (*Munch. Med. Wochenschr.*, January 14th, 1902), having noted the decreasing frequency with which amyloid degeneration was met with in autopsies performed at the Pathological Institute of Geneva, carefully examined the records of all the autopsies during the last 25 years. He found that there had been 6,320 autopsies, in which 32 per cent. showed some tubercular lesions. The disease was active in 91.9 per cent., and latent in 8 per cent. From his statistics he concludes that men are more liable to tuberculosis than women, the relative frequency being two to one. In 76 cases tuberculosis and carcinoma occurred simultaneously; and tuberculosis and sarcoma in six cases. Amyloid degeneration occurred in 106 cases. The majority of these showed some tubercular lesions, but in seven there was no evidence of tuberculosis. Zahn concludes, then, that amyloid degeneration is a lesion comparatively rarely seen, although he does not state that it has become more rare than formerly. He believes that in Geneva and its neighbourhood the people are so well nourished that this form of degeneration will not occur. This comparative rarity of amyloid degeneration has also been noted in Australia, and in Great Britain it is said to be less common than it was some 15 or 20 years ago.

The Effect of Certain Poisons on Inorganic Ferments.

Jones (*Bulletin of the Johns Hopkins Hospital*, May, 1902) states that the finely divided metals, such as platinum, gold, silver, cadmium, are inorganic ferments. The metals are obtained in a finely divided form by placing bars of the metal in pure water, and passing a strong electric current from one to the other. In this way the metal is obtained in a very fine state of division, suspended in the water in the form of a solution. These, however, are not true solutions, but are analogous to the solutions of starch, albumin, and similar bodies, and are called pseudo-solutions or colloidal solutions. These solutions of the metals have some remarkable properties, which resemble in many ways the properties of the organic ferments. For example, a colloidal solution of platinum accelerates the oxidation of alcohol to acetic acid in the presence of the oxygen of the air, as well as the organic ferment *mycoderma aceti*. Finely divided iridium decomposes calcium formate into calcium carbonate, carbon dioxide, and hydrogen in the same manner as certain bacteria. The analogy also holds good for diastatic phenomena, such as the inversion of cane sugar. The finely divided metals do not enter into the reaction they effect; hence these reactions are catalytic. From the great number of analogies these colloidal solutions of the metals must be considered in many relations at least as inorganic models of the organic enzymes. The action of the colloidal solutions of the metals, the enzymes, and catalysis generally is probably to be referred to the surface energy possessed by these substances.

Iodophilia.

Iodophilia is the reaction which certain white cells of the blood show when a dried blood-film is brought into contact with a drop of the following solution, first suggested by Ehrlich in 1883:—Iodine, 1 gram; potassium iodide, 3 grams; gum arabic, 50 grams; and water 100 c.c. Locke and Cabot (*Journal of Medical Research*, January, 1902) discuss the nature of this reaction and give their results of its use. The technique is as follows:—A cover glass film is prepared in any of the usual ways, and allowed to dry in the air, without fixation. It is then pressed down upon a drop of the iodine solution on a slide, and examined with an oil immersion lens. In normal blood so examined, the red cells are found to be uniformly coloured a bright yellow upon a much fainter background; the white corpuscles are stained of about the same tint, their nuclei being somewhat more refractile. This contrast between the nucleus and the protoplasm is sufficiently distinct to permit one readily to differentiate the various forms of leucocytes. In pathological conditions, such as septicæmia or uræmia, the uniform yellow coloration is broken by the appearance in the protoplasm of the polymorphonuclear neutrophils of reddish brown granules, or a diffuse brownish coloration, and by the presence of small and large masses outside the corpuscles similarly stained. This condition is the iodine reaction, and, as suggested, is of two distinct types, namely, (1) the extra-cellular and (2) the intra-cellular. The authors draw the following conclusions from their observations on this reaction:—

The brown masses outside the corpuscles are present in small numbers in all blood, both normal and abnormal, but frequently in such minute amounts as to be found only after long searching. Only an increase of these masses is to be considered pathological, but it appears to be of little significance. In marked contrast to the extra, they have never seen the intra-cellular granules in the blood of normal individuals, and they consider its presence to be always pathological, and the terms "positive" and "negative" refer only to the latter reaction. 1. Like leucocytosis, fever, and the diazo reaction, iodophilia signifies not a special disease or condition, such as abscess, but a general toxæmia such as might be produced by abscess, gangrene, uræmia, or malaria. Though more constantly present in the presence of pus, it is impossible to make a diagnosis of sepsis or of a purulent accumulation from this reaction alone. 2. Iodophilia is not identical with nor does it coincide in its indications with any of the ordinary physical signs, as leucocytosis, fever, etc. 3. It appears to be certain evidence that the patient is seriously ill. 4. A positive reaction occurs with considerable regularity in the following conditions:—(a) Infection with pyogenic organisms, whether local or general; (b) toxæmia of bacterial origin, as in diphtheria and typhoid; (c) non-bacterial toxæmia, e.g., uræmia; (d) disturbances of respiration; (e) grave anæmia, both primary and secondary. 5. The reaction has proved negative in pleurisy, rheumatism, alcoholism, abscesses with free drainage, lead poisoning, early malignant disease, tuberculosis, if uncomplicated by secondary infection, and various other diseases. 6. With this method of preparation one has a most convenient and rapid means of making a general blood examination, and the specimens will keep for weeks.

At a meeting of the Society of Biology, Paris, statements were made by Dr. Bouchereourt on the therapeutic value of the placenta. This is a sort of gland with internal secretion.

PUBLIC HEALTH.

New South Wales.

Wine Adulteration.—At the instance of the Board of Health an analysis was made of 123 samples of various kinds of wine. Some of these were of very poor quality, and in most cases they betrayed inferiority by the presence of saccharine and antiseptics. Dr. Thompson, president of the Board of Health, stated that the samples were from dealers, wholesale or retail, and not from the makers. It is thought that in some cases adulteration may have been effected by the dealers. A bill dealing with the manufacture of wine and prohibiting the use of preservatives and unnecessary ingredients has already been drafted by the Agricultural Department.

The Bubonic Plague.—After the lapse of about a month, two more plague rats were discovered at Darling Harbour, Sydney. Since April last the rat-catching staff have taken all the rats to the Board of Health's laboratory, where about 800 have been examined each week. No infected rat, however, had been found from June 10th until the third week in July, and, we believe, none have been found since. Dr. Thompson states that it was to be expected that the plague would remain among the rats either in a chronic form or in a few scattered cases after the epidemic had ceased; but so long as the disease existed among the rats there was a danger of human beings becoming infected. Newcastle has hitherto escaped infection, the only case which occurred there in the previous epidemics being one on board of a ship which had proceeded from Sydney to Newcastle for coal. On August 6th, however, a case was discovered in the Newcastle Hospital. A youth employed at a leading hotel in the city was sent to the hospital by Dr. Nickson as a suspicious case, and was placed in the isolation ward. The patient was subsequently found to be suffering from bubonic plague in a severe form, and he died a day or two later. He had not been away from the hotel for the last four months, so that it seems certain that the infection took place at the hotel. If this be so, it is certain that the disease exists among the rats in Newcastle, and in the ordinary course of events noted in previous epidemics we may expect the occurrence of further cases in that city.

Sydney Vital Statistics.—The report of the Government Statistician on the vital statistics of the metropolis for the quarter ended June 30th states that the births numbered 3265, and the deaths were 1445, which are 252 and 62 more than the average numbers registered for this quarter during the previous five years. With regard to the causes of death in the zymotic group the figures reveal a decline of 16 per cent. on the average number for the previous five years. Under nearly all the disease headings of this class there is a decrease, and markedly so in typhoid, diphtheria, and whooping-cough. Bubonic plague has caused 12 deaths during the quarter. It is noteworthy that deaths from miasmatic diseases in the city proper have dropped during the last month to only two, viz., one each from typhoid and plague. Constitutional diseases show an increase on the quinquennial figures from 260 to 297, the excess being caused by advances in cancer from 82 to 93, and in phthisis from 117 to 146 for the quarter. In other respects there are slight decreases. Deaths from developmental diseases increased under all headings, and particularly in premature births, 63, as against the average of 49 for the quarter. Decreases in the mortality are apparent in the nervous disorders; but there were large increases in complaints of the circulatory, respira-

tory, and digestive systems. Heart troubles increased from an average of 124 to 152 for the quarter, and pneumonia advanced from 76 to the very high record of 131. The birth rate for the June quarter exhibits an upward tendency, the quarterly rate for the previous five years being 6.33 per 1000, and that for the quarter under review 6.49. The death rate for the quarter is 2.87 per 1000, being slightly lower than 2.91, the quinquennial rate.

Victoria.

Prevention of Tuberculosis.—A valuable report setting forth the methods to be adopted for the prevention of tuberculosis has been presented to the Board of Public Health, Victoria, by Dr. Gresswell. A great amount of information is given as to the chief means of infection, and the duties of public bodies and citizens are clearly explained. In conclusion, Dr. Gresswell points out that "much remains to be done if the present yearly toll of victims to tubercle (1880 in number) is to be minimised."

Tasmania.

Board of Health.—At the meeting of the local Board of Health a letter was received from the Health Officer drawing attention to the overcrowded condition of many of the public halls and places of amusement during the previous fortnight. He suggested that the board should, in conjunction with the Central Board of Health, take such action under the Public Health Act as to limit the number of people obtaining admission. Without special regulations it would not be possible to prevent or prove overcrowding. The matter was referred to the health and sanitary committee for consideration.

Rat Extermination.—At a meeting of the Hobart City Rat Extermination Committee on July 29th, it was reported that during the past fortnight 1325 rats had been delivered at the dépôt, making a total of 18,549 since operations had been renewed. This, compared with corresponding periods of previous years, was as follows: 1900, 6832 caught by private persons, 4956 by catchers, total 11,788; 1901, 3773 and 7759, total 11,522; 1902, 4614 and 13,935, total 18,549.

West Australia.

Vital Statistics.—There were 1407 births registered in West Australia during the quarter ended March 31st, 1902. The deaths recorded during the same period numbered 671. Of this number 207 were of children under 1 year of age, or 30.85 per cent.; of children under 5 years of age 258, or 38.45 per cent., were recorded of the total deaths. The chief causes of deaths were: From zymotic diseases, 126 (typhoid fever, 66; diarrhoea, 26; dysentery, 10; beriberi, 8); constitutional diseases, 69 (cancer, 19; phthisis, 30); developmental diseases, 50 (premature birth, 28; old age, 21); local diseases, 277 (diseases of the nervous system, 46; diseases of the circulatory system, 46; of the respiratory system, 51; of the digestive system, 106).

Queensland.

The Bubonic Plague.—On August 4th a case of suspicious illness which had been under observation for some days at Brisbane was proved to be one of plague, and the patient was removed to the hospital at Colmalie. The case proved fatal shortly afterwards.

New Zealand.

The Bubonic Plague.—Consequent upon Sydney being declared free of plague, the New Zealand Health Department has abolished the regulation for the fumigation of vessels arriving from that port. The medical examination of passengers will be continued for some time.

HOSPITAL INTELLIGENCE.

Infectious Diseases Hospital, Melbourne.—The executive committee of the Queen's Memorial Fund reported recently that the Infectious Diseases Hospital was practically complete, and only required to be furnished to make it ready for occupation. The funds at the disposal of the committee in carrying out the work amounted to £22,500, exclusive of the promised Government grant of £4000.

Prince Alfred Hospital, Sydney.—At the monthly meeting of the board of directors of the Prince Alfred Hospital a report was received from a committee to revise the rules and by-laws of the institution, recommending various changes in the method of administration, particularly in the direction of relieving the medical superintendent of much of the management of the non-medical portion of the work, which should be handed over to the secretary, whose duties would thus be extended. The report was adopted.

Newcastle Hospital.—A deputation from Newcastle asked the Premier for a grant of £4000 for the erection of a new kitchen, laundry, and accident ward. The old kitchen had been condemned by the Government Architect and the President of the Board of Health. They also asked, on behalf of the hospital, to be recouped for the expenditure of £1690 10s 8d in furnishing the nurses' home, and for repairs to the hospital rendered necessary by severe gales some years ago. The Premier promised to place on the Estimates a sufficient sum of money to recoup the committee for its expenditure and enable it to carry on its work.

The Women's Hospital, Sydney.—At the monthly meeting of the board of management a number of alterations in the term of training for nurses, dating from January 1st next, were adopted. For the position of resident medical officer, Dr. Grace Russell, of Auckland, was appointed.

Sydney Hospital.—At the monthly meeting of the board of directors of the Sydney Hospital, on the application of Dr. Herschel Harris (hon. skiagrapher), it was decided to purchase new equipment for the skiagraphic department, in order to bring this department up to date. Authority was given to the house committee to take such steps as might be necessary to secure further accommodation in connection with the ophthalmic branch.

Warrnambool Hospital.—At the annual meeting of subscribers to the Warrnambool Hospital and Benevolent Asylum, Drs. Connell, Fleetwood, O'Brien, Scott, Nilson, Macnamara, Chaplin, and Macknight were elected honorary medical officers. The balance-sheet of the past year's transactions shows a credit balance of £1167 8s 5d on maintenance account, and of £193 15s on building account. The report of the chief inspector of charitable institutions extols the management of the institution, and states that it is far and away the most economically managed institution of the kind in Victoria.

Warracknabeal Hospital, Victoria.—At the annual meeting of the subscribers to the Warracknabeal District Hospital the proceedings were animated owing to the fact that during the year the committee had changed its medical officer, its action in doing so having aroused opposition resulting in a report being obtained by the Inspector of Charities. The latter unfavourably criticised the action of the committee in dispensing with the services of the medical officer because he failed to discontinue keeping a private hospital.

Melbourne Hospital.—The annual report of the committee of management of the Melbourne Hospital, which was submitted to the governors at a meeting in the Melbourne Town Hall on July 24th, showed that the deficit at June 30th amounted to £30. The receipts totalled £27,632, the expenditure £27,584, while the patients treated numbered 21,474. Mr. F. R. Godfrey, who presided, stated that the institution now occupied a better financial position than it had done for many years. It was believed that no difficulty would be experienced in raising the money that would be required to carry out the suggestion to rebuild the hospital. The committee has decided to invite competitive designs for a new hospital building on the present site. Prizes of £250 and £100 will be offered for the best two designs.

The Women's Hospital, Melbourne.—At a meeting of the joint sub-committees, appointed on the one hand by the general committee of the Women's Hospital and on the other hand by the honorary staff, held at the Women's Hospital recently, the sub-committee was authorised by the representatives of the honorary staff to state publicly that the members of the honorary staff had not at any time, as already repeatedly stated by them, been parties to the alleged medical boycott, and that they will welcome to the hospital wards any qualified resident surgeon or surgeons appointed and considered satisfactory by the hospital committee. On August 8th, at its meeting, the Women's Hospital Committee decided to appoint Dr. J. McNaughton, of Hamilton, to the position of resident medical officer. The salary attached to the position is at the rate of £250 per annum.

PERSONAL ITEMS.

Dr. Ramsay, the surgeon superintendent, Launceston General Hospital, has been granted 18 months leave of absence. He leaves in October, and will make an extended tour of the Continent. Dr. Heywood, house surgeon, has been appointed acting superintendent.

Dr. Thomas Francis Bride has been nominated by Sir John Madden, and seconded by Dr. Kernot, for re-election as a member of the Melbourne University Council.

Dr. Malcolm Matheson, who recently left Sydney for Croydon, Queensland, was recently the recipient of presents as marks of esteem from his numerous friends in Waverley, and also the officers of the Masonic Lodge. The presents consisted of a handsome gold watch from the doctor's many friends, and a gold Albert and pendant from the Masonic Lodge.

Dr. Alexander Pentland has succeeded to the practice of Dr. Alfred Foster at Wahroonga, near Sydney. Dr. Foster has left for a trip to England.

The Hon. W. H. Embling, M.L.C., after 25 years' service has resigned his position as hon. physician to the Alfred Hospital, Melbourne. In order to mark his long and faithful service on the staff his colleagues entertained him at dinner.

Sir Thomas Fitzgerald, who has for many years past occupied the position of senior surgeon at the Melbourne Hospital, has forwarded his resignation to the committee of management. It was decided that a letter be sent thanking him for his valuable services, and that he be appointed honorary consulting surgeon to the institution. The position vacated by Sir Thomas Fitzgerald will be taken by Dr. Moore.

Dr. J. Morison Gardiner, of Ballarat, Victoria, has taken the house recently occupied by Dr. Robert Scott, who has now removed to the late Dr. Pincock's former residence. It was inadvertently stated in our last issue that Dr. Gardiner had succeeded to Dr. Scott's practice in Ballarat.

Dr. Dawson, of Pahiatua, N.Z., who acted as Surgeon-Major of the 7th N.Z. Contingent, has returned home.

Dr. McCready is about to commence practice at Warkworth, N.Z. He was formerly in practice at Stranraer, Scotland.

Dr. G. Hodges, of Port Chalmers, N.Z., has been spending a holiday in the Hammer Thermal Springs district. During his absence his practice has been taken charge of by Dr. Thomas Burns.

Dr. and Mrs. F. R. Riley, of Dunedin, left on May 31st, by the s.s. "Rimutaka," on an extended trip to England. Dr. Riley's practice is being looked after during his absence by Dr. E. H. Williams.

Dr. Emily Siedeberg, of Dunedin, met with a serious accident on June 6th, when she was thrown from her trap through a collision with another vehicle. It will probably be a month before Dr. Siedeberg will be able to resume her professional duties.

Dr. John Larwill, L.R.C.P. and S. (Edin.), has resigned his appointment as Medical Officer at Boonah, Queensland.

Mr. William Short, L.R.C.P., etc. (Edin.), has been appointed a member of the licensing board for the licensing district of Corowa, N.S.W.

MEDICAL NOTES.

Our attention has been drawn to the proceedings in the Legislative Assembly, reported in *Hansard* of July 17, during which an unwarranted and cowardly attack was made on the professional reputation of Dr. Woodward in his capacity of medical officer to the N.S.W. Railways. No doubt Dr. Woodward is perfectly capable of taking care of himself; and his immediate employers, the Commissioners, know his value too well to allow of parliamentary oratory affecting their opinion on that point. Dr. Woodward was for many years a medical officer in the Imperial Army, and rose to the position of Deputy Surgeon General. He served in many important campaigns, was a personal friend of Lord Roberts, and no officer in the

Australian colonies has seen so much active service. His relations with his brother practitioners have generally been cordial and always free from reproach; and although he has often had occasion to differ from them on medical questions he has never alienated their respect. Dr. Woodward has held his present appointment since 1883, and by his unswerving rectitude in the administration of his office has, we believe, saved the country thousands of pounds.

Libelling a Doctor.—At the recent sittings of Cooma District Court, Dr. Joseph Ryan claimed £200 damages from F. C. Hogg, proprietor of the *Manaro Mercury*, for alleged libel, arising out of the publication of a report of the hospital committee meeting held on May 14th, in part of which defendant alleged and imputed him to be guilty of cruel and inhuman conduct towards the matron, and stated that he had falsely represented that a patient was suffering from erysipelas, in order that the matron of the hospital might be forced to perform a certain operation, and that plaintiff's action was wanton, malicious, and corrupt. Defendant paid 20s into court in satisfaction of all claims. The Judge said he was surprised that the press reported such matters, and expressed a wish that the case had been tried with a jury. A verdict for plaintiff for £100 and costs on the higher scale was given.

A Charge against a Gaol Surgeon.—At an inquest concerning the death in Melbourne Gaol of a man aged 75, the jury found that deceased died of pneumonia, and that his death was accelerated by the action and the neglect of Mr. Godfrey, surgeon at the Melbourne Gaol. The jury brought in a verdict of manslaughter against Mr. Godfrey, who was committed for trial. Following upon the verdict the Coroner fixed bail at 10s, and sent an immediate recommendation to the Crown law authorities that a *nolle prosequi* be entered. Effect was given to this by the Attorney-General on Friday. Several members of the profession in Melbourne have expressed their sympathy with Mr. Godfrey.

Presentation to Nurses.—On the occasion of the recent presentations to the artillery in Adelaide, Lady Tennyson handed Nursing Sisters Glennie and Bidmead the Maltese crosses presented them by the King, and with the devoted service crosses purchased out of the interest of the fund subscribed by the public to send nurses to South Africa.

OUR ADVERTISING COLUMNS.

Messrs. TOOTH & Co., LTD., bring under the notice of the profession the Zetz-Spa mineral water, which is an alkaline effervescent water somewhat similar to Vichy water in its chemical composition.

"Yohimbim," an alkaloid derived from the bark of the Yohimbe tree, and said to be a powerful aphrodisiac, is also introduced to the profession.

The Colonial Mutual Fire Insurance Company, Ltd., announces that it issues policies indemnifying against accident and disease.

Capilla Hair Tonic, a non-oily preparation for the hair, which is said to contain Witch Hazel as one of its ingredients, is advertised.

Messrs. Falk & Co., photographers, specially request that the members of the New South Wales Branch who have not yet favoured them with a sitting will do so as soon as possible.

MEDICAL APPOINTMENTS.

NEW SOUTH WALES.

Cummings, Harold Lytton, L.R.C.P., M.R.C.S. Eng., to be Government Medical Officer and Vaccinator at Braidwood, *vice* Dr. R. Llewellyn, deceased.
 Ellis, Laurence Edward, M.B., M.Ch. Univ. Syd., to be Government Medical Officer and Vaccinator at Manilla, *vice* Dr. W. F. C. Lawson, resigned.
 Graham, Mabel Jessie, M.B. Syd., to be Government Vaccinator at Peteraham.
 Moffitt, Charles Gordon, M.R.C.S., L.R.C.P., D.P.H. Lond., to be Junior Medical Officer in the Department of Lunacy.
 McCredie, Robert William, M.B., Ch.M. Syd., to be Government Medical Officer and Vaccinator at Brewarrina.
 Sproule, William, M.D., M.S. Edin., to be Government Medical Officer and Vaccinator at Wyalong, *vice* Dr. Willis, resigned.

VICTORIA.

Chapman, John Taylor, L.R.C.P., to be Officer of Health for Eltham (Eastern Riding), *vice* Otto F. Gmelin, M.D.
 Gillespie, Leslie Thomas, M.B., to be Health Officer for the Shire of Tungamah, *vice* William Finlay, M.D., resigned.
 Howitt, Godfrey, M.B., to be Officer of Health for Fitzroy during the absence of F. W. W. Morton, L.R.C.P.
 Jackson, Allan Godwin, M.D., to be Officer of Health for the North and West Ridings of the Shire of Ripon, *vice* Charles Fredk. Lethbridge, M.R.C.S., resigned.
 Kennedy, Thomas John Moore, M.B., to be Health Officer for the Port of Geelong, *vice* Rupert Pincoff, M.R.C.S., resigned.
 McKenzie, John Hugh, F.R.C.S., to be Public Vaccinator for the Metropolitan and Midland Districts, *vice* John Binney Hay, M.B., resigned.
 Shields, Andrew, M.D., J.P., to be President of the Medical Board of Victoria, *vice* Thomas Rowan, M.D., J.P., resigned.
 Thwaites, Johnstone Simon, M.B., to be Public Vaccinator for the Midland District, *vice* W. A. H. Barrett, L.R.C.P., resigned.

WESTERN AUSTRALIA.

Elphick, Edward, to be District Medical Officer at Newcastle, and Public Vaccinator for the urban and suburban districts of Newcastle and rural district of Toodyay.
 Humphrey, E. S., to be Medical Officer for the examination of candidates for railway service at Southern Cross.

TASMANIA.

Morris, Dr. Andrew B., to be Officer of Health for the District of St. Helens.

QUEENSLAND.

Dixon, Graham Patrick, M.B., M.Ch., to be Official Visitor to the Reception House at Maryborough, *vice* Henry Croker Garde, F.R.C.S. Edin., etc., resigned.
 Roe, James Morris, M.B. Syd., to be Medical Officer at Tenninger (Mount Perry).

NEW ZEALAND.

Allen, Sydney Chalmers, M.B., B.Sc., to be Assistant Medical Officer of the Lunatic Asylum at Seacliff.
 Bond, Joseph Henry, L.R.C.S., etc., to be Public Vaccinator for the District of Thames.
 Fleming, William Alexander, M.B., to be Public Vaccinator for the District of Balclutha.
 Frengley, Joseph Patrick, M.D., D.Ph., etc., Wellington, to be a District Health Officer.
 Horne, George, M.D., D.Ph., etc., to be Public Vaccinator for the District of New Plymouth.
 McClelland, Hugh Augustus, M.R.C.S., etc., to be Public Vaccinator for the District of New Plymouth.
 McKelvey, Alexander Neil, L.R.C.P.I., L.R.C.S.I., etc., to be Assistant Medical Officer of the Lunatic Asylum at Auckland.
 Watson, Frederick James, M.R.C.S., etc., to be Public Vaccinator for the Districts of Bulls, Rougetoa, and Sanson.

To be Public Vaccinators under "The Public Health Act 1900"—

Bennett, Thomas, L.R.C.S. 1857, Foxton.
 Bluett, Peter Frederick William, L.R.C.P. Edin., L.F.P.S. Glas. 1881, Rakaia.
 Fitzgerald, William, M.B., etc., 1895, Granity.
 McKane, Michael Charles Frederick, M.B., Ch.B. Univ. N.Z. 1901, Ross.
 Perceval, Montagu William Cairns, Lic. and Lic. Midwif. K. and Q. Coll. Phys. Irel. 1877, Patea.
 Roberts, Edward Evan, M.B., etc., 1880, Cambridge.
 Sutherland, James, M.B., etc., 1892, Tokomairiro.
 Will, Thomas Arthur, M.B., etc., 1900, Pelorus.
 Wilson, John Bernard, L.R.C.P., etc., 1892, Huntly.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

NEW SOUTH WALES.

Campbell, Archibald Way, M.B., Ch.B., Univ. Adelaide 1896.
 Patrick, Harry Couper, M.B., Ch.M. Glas. 1885.
 Leighton-Jones, Henry, L.R.C.P. Edin. 1902, L.R.C.S. Edin. 1902, L.F.P.S. Glasg. 1902.
 Halcomb, C. D., M.B. Syd. 1902.

WESTERN AUSTRALIA.

Finlay, Hunter, L.F.P.S. G. 1880, M.D. Glas. 1880.
 Moore, William Edward, L. & L.M.R.C.P.I. 1891, L. & L.M.R. C.S.I. 1891.

BIRTHS, MARRIAGES AND DEATHS.

BIRTHS.

BICKLE.—On 8th July, at Warra Warra, North-terrace, Adelaide, the wife of L. W. Bickle, F.R.C.S., Ed., of a daughter.
 JENNER.—On July 9th, at "Evama," Norton-street, Leichhardt, N.S.W., the wife of Dr. W. Jenner, a daughter.
 MACCORMICK.—July 8th, at 125 Macquarie-street, Sydney, the wife of Alexander MacCormick, of a son.
 MARSHALL.—July 18th, at 80 College-street, Hyde Park, Sydney, the wife of George A. Marshall, M.B., of a daughter.
 McDONAGH.—July 22nd, at 173 Macquarie-street, Sydney, the wife of Dr. J. M. McDonagh, a son.
 WILSON.—July 25th, at "Apheta," Nelson-street, Woollahra, Sydney, the wife of Professor James T. Wilson, M.B., C.M., Edin., of a daughter.

MARRIAGES.

KNIGHT-GULLAN.—On June 29th, at Presbyterian Church, Winchelsea, by Rev. J. C. Baird, of St. Andrew's, Geelong, Vic., Glen A. Knight, M.B., B.S., only son of Mr. Glen A. Knight, Bay-street, Fort Melbourne, to Maggie Violet, third daughter of Mr. M. K. Gullan, Carringle, Winchelsea.

DEATHS.

GIBSON-SMITH.—On June 23rd, at Balclutha, New Zealand, John Gibson-Smith, L.R.C.S., Edin.; aged 65 years.
 WESTBROOK.—July 28th, at his residence, 20 Bligh-Street, Sydney, Dr. Talbot Westbrook, aged 43.
 WOOLDRIDGE.—On July 11th, at Glenelg, S.A., Henry Wooldridge, F.R.C.S.E., late of South Yarra, Vic., in his 61st year.

Dr. H. Skipton Stacy, 28 College-street, Sydney (late Resident Pathologist Sydney Hospital), examines pathological specimens, including Blood (Widal's reaction, corpuscular count, bacteriological examination, etc.), Sputum, Urine, Tissues, and Throat Swabbings.

MALE ATTENDANT for mental, inebriate, or general cases, seeks engagement. References and testimonials show 13 years' experience, including five years as attendant at Callan Park Hospital for Insane, three years as wardman in charge of Singleton Hospital. Address J. HILKS, 161 Cecily Street, Leichhardt.

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Mr. W. A. Dixon, F.I.C., F.C.S., Public Analyst of Sydney, after making exhaustive tests, says:—"There is no doubt but that 'Eumenthol' Jujubes have a wonderful effect in the destruction of bacteria and preventing their growth. . . . I have made a comparative test of 'Eumenthol' Jujubes and Creosote, and find that there is little difference in their bactericidal action."

FOR SALE.—One $\frac{1}{2}$ Immersion Lens, by Zeiss. S. MILLS, Broadway, Glebe.

AUSTRALASIAN MEDICAL GAZETTE.

COMPLETE PROSTATECTOMY AND THE BOTTINI OPERATION.

By H. Y. Critchley Hinder, M.B., Ch.M., Sydney,
Lecturer on Clinical Surgery and Surgeon Prince
Alfred Hospital, Sydney.

I HAVE appeared before you on previous occasions as an advocate of operative treatment for prostatic hypertrophy. I do so again to-night with the firm conviction that early operative treatment, before the kidneys have become disorganised, is the treatment which will most surely prolong the lives of our old and elderly men.

However, I would rather not invite criticism to-night on the question of operative treatment versus catheter life, nor do I wish to review the operative treatment of prostatic hypertrophy, but simply to direct your attention to the results of these few cases which are illustrative of two methods of treatment which apparently have come to stay. I am well aware that I have before advocated the operation of Belfield, who aims at cutting away a low level channel through the prostate, in order to allow the bladder to be completely emptied, the sure test of the functionally normal bladder, the sure guarantee that backward pressure will not exert its baneful influence on the excretory ability of the renal organs.

Belfield's operation has still a wide sphere of usefulness, particularly if associated with perineal drainage in those cases where the prostate is not very large, though the obstruction to urination be very complete. It is certainly not nearly so safe, not nearly so likely to be followed by good results in large adenomatous prostates which may be removed very satisfactorily in one mass.

It must not for one moment be imagined that complete removal of the prostate is the operation of the future applicable for all cases.

Recently, as you are all well aware, a very wordy warfare was conducted, in which the whole matter of precedence, the whole matter of complete or incomplete removal, depended on the answer to the question—What is the capsule?

Mansell Moullin, in his very neat description of the anatomy of the prostate, speaks of the capsule and the sheath, a division which greatly helps us to a better understanding of this much debated question. The capsule of the normal prostate is the fibrous tissue layer which intimately surrounds the prostate, sending in

fibrous septa, which support the muscular and glandular elements. This capsule has a more or less intimate connection with the sheath, which is altogether formed by the pelvic fascia passing on to the posterior layer of the triangular ligament below. This description, however, by no means settles the difficulty, for it is maintained that the adenomatous overgrowth in large prostates flattens out the normal prostatic tissue, giving rise to a distinct lamination at the outskirts, containing islets of normal gland here and there. The question at issue is this: Have we here, in the mass removed, prostate plus capsule, or have we split off and left behind a thin layer of the prostate which is firmly welded to or interwoven with the adjacent capsule? Fenwick, again, in the "Journal of Anatomy and Physiology," in 1886, gave a very clear account of the veins about the prostate, and he maintains that, inasmuch as the veins in old men are valveless and lying between what we understand to be the capsule and the sheath, they are yet so closely applied to the capsule that it would be impossible to tear away this capsule without tearing these veins, and that these veins being valveless, of great size, and but a very short distance from the iliac trunks, would bleed furiously, and speedily be followed by disastrous consequences. This is precisely what may happen in some cases. The smallest prostate I show you to-night has a small bunch of adenomata springing out just at the internal orifice of the urethra sufficient to give rise to a few months misery, repeated tenesmus, very difficult catheterisation, and finally absolute retention. The rest of the gland was practically normal. The complete removal was begun and completed with the greatest difficulty, as the prostate had to be stripped and partly cut and torn from its bed. The venous oozing was marked at the time, and the reactionary bleeding was alarming, but was ultimately stopped by gauze packing and manual pressure.

I think the reason why we get hæmorrhage in small prostates, and why there is less fear in the large adenomatous variety is this: Fenwick, in 1885, pointed out that the veins forming a communication between the prostatic and hæmorrhoidal veins were in young people well supplied with valves, and I venture to presume that the same condition held good to a very great extent in older folk with normal urinary, or, at any rate, normal prostatic conditions. In old men suffering from prostatic trouble, the prostatic veins become tor-

tuous, the valves give way, blood circulates through them but feebly, and phleboliths are very common; in fact, one would expect that their occlusion naturally, or by surgical means, would be a much simpler matter than would be the case with veins associated with unenlarged prostates.

Freyer, in his last recorded case in February of this year, still maintains that the whole prostate, including the capsule, is removed, and that the prostate is slipped off the urethra, "just as a bead is drawn off a string," leaving the urethra severed from its connection with the bladder, but otherwise lying loose and intact.

Cuthbert Wallace, in a recent very able review of this subject based on the examination mainly of post-mortem specimens, points out that so laminated is the peripheral part of the prostatic mass removed, and so definite are the lines of cleavage immediately within what ought to be the anatomical capsule, that it would be well-nigh impossible to say when operating whether the mass contained capsule plus prostate or not, and an inspection of the specimens before you will probably give you the same impression. On the other hand, it can hardly be said that only adenomatous masses are removed, for prostatic tissue is evident throughout the mass. My own impression in removing these prostates was that I had removed the whole prostate, which was practically riddled with adenomata.

One point which to my mind is somewhat in favour of the capsule itself being removed is the great resistance which is offered to the removal. The prostatic mass does not shell out, as we ordinarily understand the term, but a considerable amount of intelligently directed physical strength is necessary to tear away the prostate from its bed, so that the term "shelling out" would be a misnomer. Fenwick maintains that it would be impossible to remove many small prostates after this method.

I have, so far, completely removed the prostate in five cases. Their ages varied from 67 to 72 years. Four of them have completely recovered, and are able to void their urine as easily and completely as when they were young men. They are also able to retain their urine the whole night.

The fifth case was in too bad a condition for radical operation. He had been very much troubled for about seven months, and finally suffered from complete retention. Some old inflammatory condition made all efforts to pass an instrument futile. He was opened suprapubically, and the prostate (the smallest of the lot) was removed with great difficulty. He lived for a week, and died of uræmia, with almost complete suppression of urine. These cases

where catheterism has been attempted, and even where the bladder has not been entered, very often die after a median cystotomy pure and simple from gradually increasing suppression of urine. There is no help for it, operative treatment is the only hope for some of these cases where catheterism is practically impossible or productive of intense pain. We all know that some men suffer from retention, are catheterised and completely recover; but, still, every now and again one dies, and radical treatment when acute symptoms are absent is certainly wisest.

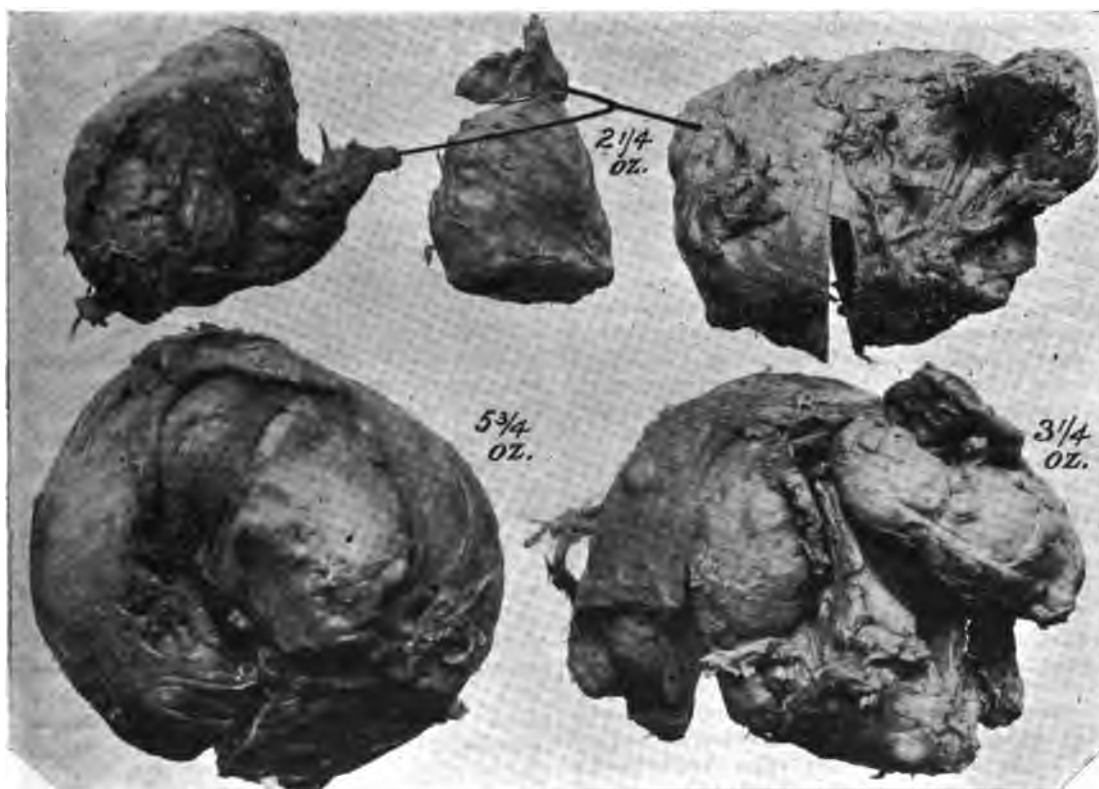
I shall only mention one case in detail, as it presented features of interest. This patient, aged 70 years, came to me first some time ago with stone in the bladder and a very large prostate. He was in a bad way, and looked very ill. I attempted to crush the stone, which I knew was in a deep pocket, but I could do no more than clew off the projecting portion, so that I was compelled to open suprapubically. The bladder-wall was red and inflamed, and covered with phosphatic patches. The stone after which I had struggled was with difficulty broken up and scooped out of a bottle-shaped pocket. The old man recovered, and submitted to a vasectomy before he went home. Four months after, Dr. Walley, his medical attendant, sent him back to me very poorly with great frequency, deep-seated perineal pain, and passing a lot of pus at intervals. The seat of the pain in particular made me feel sure that stone was present, so I reopened suprapubically and removed 16 faceted stones and the whole of the prostate. When he left me he had clear acid urine, no pain, no residual urine, and he was able to hold his urine for 11 hours.

I might add that the vasectomy did not appear to have had any appreciable influence on the prostate. This case reminds me of one in which I blundered some time ago, but I gladly tell the story with the hope that the lesson may be of service to others. About two years ago when I was trying the effect of vasectomy on enlarged prostates I had an old man in Prince Alfred Hospital with chronic cystitis and enlarged prostate. The cystoscope was useless, the prostate was so large. Sounds revealed nothing. He went away with instructions to return and report himself. He did return, and visited a surgical *confrère*. The surgeon in question could find no stone, but thinking that stone might be present operated suprapubically and removed several from a post-prostatic pouch. The old man went home with a sinus, and was in a very short time as bad as ever. I expect that he formed more stones. Removal of the prostate would have given him as good a result as these cases I have been speaking about.

I think few of us are aware of the rapidity with which stones form in the bladder, particularly phosphatic stones. I have known a stone as large as a pigeon's egg form within four months after suprapubic removal of stone. In such a case one could positively swear that no remnant had been left. I have known the same thing happen after litholapaxy, and cystoscopic examination had shown a clean bladder free from *débris*.

There are just a few points of interest about these cases. Operation has been refused some

I purposely passed my finger round to the triangular ligament and broke it off, and then worked the mass towards the bladder. At all events the result was all that could be desired. It is also evident that the so-called internal sphincter has nothing to do with micturition, nor does micturition depend for its initiatory stimulus upon the integrity of the prostatic urethra. Freyer, in his reported complete removals, has left the urethra, whether from design or not he does not say. My own impression was that a flaccid tag end of urethra



prostatic patients because they have had a fairly low specific gravity urine with albumen. Four of these patients had urine whose specific gravity was from 1010 to 1013 and a varying quantity of albumen, which was of less importance because pus was present also. After recovery the albumen disappeared and the specific gravity rose.

Some writers, in speaking of this operation, have been somewhat concerned lest the integrity of the prostatic urethra should be disturbed. Apart from the sexual aspect of the question, the prostatic urethra without the prostate seemed to me to be of little value, so

was far more likely to give rise to stricture than no urethra at all in a situation where the narrowing up after the removal of a large prostate could hardly be so complete as to block the passage altogether. Certainly the result in these cases has been admirable, and absolutely normal micturition has been established.

When one considers the condition of these poor unfortunates straining to pass urine every hour or half-hour, with painful urethritis and foul urine, worried with want of rest and bodily and mental pain (hardly the conditions one would choose for the performance of a

major operation), the results are very gratifying, and the risk would be much reduced if the prostates could be attacked before instrumentation and septic conditions have been established.

Men are apt to treat too lightly the introduction of their patient to a catheter life. For my own part I invariably point out to my patient the seriousness of the step, for not only has it happened in one or two cases of my own, where every conceivable precaution was taken, but also in the practice of extremely careful men, that catheterism in a perfectly clean bladder has been followed by death within two or three days or as many weeks; yet such clean cases do admirably after operative treatment and free drainage.

The operation known as Bottini's practically aims at cutting with a red-hot platinum blade a channel through the prostate so as to open up the urethra and allow urine to pass out by the low level gutter thus formed. A battery of 45 to 50 ampères is required to heat this blade in the damp tissues. The shaft of the instrument is kept cool by means of a water-jacket. The bladder should contain about five or six ounces of water at the time of operation.

Bottini and his disciples claim that this operation has a lower mortality and a greater percentage of recoveries than any other operation for the relief of prostatic hypertrophy.

Some operators met with poor success, but this can hardly be altogether attributed to the operation. My own impression is that the indiscriminate operating on every case has done more to damage the operation than anything else. The great amount of cutting and the large sloughs which must invariably follow such incisions in a very large prostate are likely to be a source of danger, partly from the difficulty in getting rid of so much necrotic material and partly on account of the hæmorrhage likely to take place on their separation.

The larger the prostatic mass the greater would be the difficulty in obtaining a good result by this method, though, at the same time, the amount of obstruction to micturition must by no means be measured by the amount of residual urine. An examination should be conducted with the cystoscope, and if it is impossible to mount over the prostate so as to see the bladder wall, it may, as a rule, be taken for granted that the prostate is a large one. Rectal examination will probably confirm this. A very fair conclusion may be arrived at by simple examination with a short-beaked sound combined with the evidence obtained by passing the finger into the rectum.

If the hypertrophy be not great, the cystoscope is extremely valuable, inasmuch as it

will indicate whether there is a uniform upheaval, a central median nodule, or a lateral excess in growth. Without this evidence the prostatic incisor would, indeed, work in the dark. It is certainly a poor condemnation of the instrument to say that it must be used in the dark. A man who has not eyes at his finger tips would find surgery a very small field indeed. A lithotrite is a dreadful-looking tool which is used very well in the dark. The obstacle may be first seen, its size estimated, the length of the urethra measured, and the length of the cut measured; in fact, when conducted thoughtfully and intelligently there are few operations which are safer and which are attended by more pleasing results; the results, in fact, give the best reply to the carping critic.

Willy Meyer, in 1900, reported on a series of unselected cases which were taken as they came; this number has been considerably amplified since then. His cures amounted to about half, the relieved about 30 per cent., and the deaths to 10 per cent. These results are remarkably good when one considers that two at least of those who recovered suffered from pyelitis.

I have so far operated on nine cases, and they were to a certain extent selected cases.

1. A man of 50, with frequency three times in the night, 2 oz. of residual urine and more or less constant pain at the neck of the bladder and across the loins. Eight hours after operation he felt a little stinging pain. He was operated on nine months ago. Since then he has had no residual urine, and is in good urinary health.

2. A man, 70 years old, with absolute retention and a rather large prostate cystitis and pyelitis. He improved, was able to pass urine, with still 2 oz. of residual urine. Six weeks after operation he died of pneumonia following influenza.

3. A man of 62 years of age, with 4 oz. of residual urine, and passing urine every two hours at night. He now has about 2 drachms of residual urine and feels quite well, having no nocturnal frequency.

4. This patient was 83 years old, with foul urine and 13 oz. residual, with all the attendant misery which usually accompanies such a case. He was getting about the ward at the end of three weeks after operation, with clear urine and 1½ oz. residual urine, when he fell and bruised himself so extensively that he died in a few days. His urinary health remained good until his death.

5. This patient had submitted to a partial prostatectomy when suffering from complete

prostatic retention. He recovered to the extent of having 4 oz. of residual urine, which did not improve. Within two weeks of the operation by the Bottini method he had perfect urinary health, and was able to completely empty his bladder.

6. This man had three ounces of residual urine. I failed on the first occasion to make a sufficiently thorough cutting away of the prostate, so that he still had an ounce and a half of residual urine, though he felt extremely free from the pain and very great frequency which had worried him so much of late. In fact, he stated that he used to pass his urine from ten to 20 times every night. While in hospital it varied from ten to 12 times between nine o'clock and daylight. After the second operation the residual urine was reduced to one and a half drachms. I think it very probable that this will still further diminish.

The 7th, 8th and 9th were cases of complete and partial retention; the cure was absolute in two, and almost absolute in the other.

It certainly does appear that some degree of finality is being arrived at with regard to the operative treatment of prostatic hypertrophy. The operations of vasectomy and orchectomy will bring about the reduction of the normal prostate, and are of service in reducing the size of congested and irritable prostates; but I know from my own observation that they have but little effect on the prostate whose increase depends on adenomata, and some other well-established pathological changes.

Bottini's operation seems to be particularly adapted to early cases. The risk is slight, the recovery rapid, and the pain which follows is wonderfully little. If recurrence should take place the operation may be repeated. The measure of success which attends the operation must depend to a great extent upon the operator's knowledge of the precise character of the obstruction to be attacked, and if the gland be so large that cystoscopic examination is impossible, it would certainly be wiser to adopt a suprapubic or perineal operation, partly because a removal of a portion, or preferably the whole of the gland, would bring about a more certain cure, and partly because it would be impossible to negative the presence of a post-prostatic stone.

Those large adenomatous prostates which are so satisfactorily removed by the suprapubic method in one mass are just the cases which are attacked with the least satisfaction by the Bottini method. No doubt the great difficulty to be contended with is the reluctance of patients and medical men to submit cases of early prostatic trouble to operative treatment, though undoubtedly this is the time when operative treatment may be carried out with the smallest

amount of inconvenience and danger to the patient, and the greatest amount of satisfaction to the operator.

Whether the prostate is completely removed or not, matters little. I think it is plain to anyone who examines these specimens, that all the prostate that could be left might be represented by the thickness of a piece of brown paper; at all events, it would not be likely to interfere with the restoration of normal micturition. The truth may be arrived at some day when some patient dies and his pelvis is examined.

I hardly like to complete this record without referring to our indebtedness to Freyer for having brought so prominently before the profession the complete removal of the prostate. He may not have been the first to remove the prostate completely, but he was certainly the first to recognise what such a complete removal meant—to recognise the fact that he could in selected cases set out to effect a complete removal, and with an excellent prospect of success.

To the advocates of catheterism let me say one last word: I simply speak from my own experience. The bladder of prostatic patients will always be found to be aseptic unless stone is present or an instrument has been passed. There is every probability that prostatic patients suffering from vesical stone owe its presence to the fact of a stone having arrived from the kidney or to cystitis having been induced in a healthy bladder by the introduction of a foreign body. There is every reason to believe that stones do not originate in the bladder unless sepsis or a foreign body is present.

(Read before the New South Wales Branch British Medical Association.)

A CASE OF PLACENTA PRÆVIA WITH CONTRACTED OS AND RIGID CERVIX.

By G. E. Todd, M.D., and H. A. Sweetapple, M.D., Adelaide.

MIDWIFERY cases in which placenta prævia occurs always cause considerable anxiety, and when to this condition a rigid cervix and tightly contracted os are added, the case becomes at once not alone extremely difficult to the accoucheur but dangerous in no slight degree to the patient. If one may judge by the number of examples of this condition published in the medical journals, one would come to the conclusion that such cases were not very rare. Up to the time that this case occurred in my own practice I had come to the conclusion, on thinking over papers on the subject, that if an anæsthetic had been pushed to the full extreme, the os and cervix would have

dilated or at least be easily dilatable, and that delivery could be accomplished with comparative ease. This I have always found to be the case, and I think with very few exceptions it is the rule. However, this is not always so.

Mrs. C. I., *et. 24*, was eight months pregnant with her first child. After some unusual exertion she felt an abdominal pain, and had a slight blood-stained vaginal discharge. When I saw her a few hours after the commencement of her symptoms she was in bed, and the pain and bleeding were very much diminished. Per vaginam the os was tightly contracted, and the presentation could not be accurately made out. She was ordered to keep her bed, and when I visited her in two days' time I found that all pain and bleeding had ceased.

As a precaution another two days' rest was enjoined. The next afternoon she got out of bed to pass urine, and while doing so felt a sharp abdominal pain, with faintness. She was lifted back into bed, and a considerable amount of blood came from her vagina. On my visit, two hours afterwards, I found the patient blanched and faint. Hæmorrhage was still going on, and the os was about the size of a florin. The cervix was not at this time rigid; it appeared to be dilating, and on introducing two fingers I could feel the placenta presenting. This I was able to separate some two inches up from the os, and on the left side I came upon the free placental margin. The bleeding was at once diminished, and henceforth was not a cause of urgent anxiety.

As labour pains were increasing in severity and frequency and the head was presenting, I waited an hour in the hope that labour would terminate naturally. At this time the os and cervix felt moderately soft, and as bleeding still persisted, I decided to give ether and deliver. I anticipated no difficulty, but after getting the patient completely under an anæsthetic I found, on vaginal examination, that the cervix had elongated and that the os was now hard and almost closed. I directed the experienced nurse, who was continuing the ether, to push it still further, but even then only with the greatest difficulty could I insinuate my two fingers into the cervix. All attempts to introduce a blade of the forceps were fruitless. Still thinking that if the ether had been pushed to the full extent dilatation would be possible, I sent round for Dr. Sweetapple, who gave the anæsthetic fully, but the cervix and os remained as rigid as before. Neither Dr. Sweetapple nor I could dilate sufficiently to get more than two fingers into the uterus. We decided, therefore, to desist and to give 20 grains of chloral every hour for three hours. On our return the

patient had taken 60 grains. Dr. Sweetapple decided to give chloroform, and on examination I found the cervix and os somewhat softer, but still I could not dilate sufficiently to introduce the forceps. As my hands were rather cramped I took over the administration of the chloroform, and Dr. Sweetapple, after many efforts, at last succeeded in getting the instruments on, and I delivered without any great difficulty. The placenta followed immediately on the birth of the child, which was dead. The patient made an excellent recovery, and I got a teno-synovitis of my right wrist, which kept it stiff for at least three weeks. This was a case unique in my rather long experience of midwifery. As I have stated, I have hitherto always thought that all that was necessary to enable the os uteri to be dilated fairly easily was that an anæsthetic, ether or chloroform, should be pushed to the extent of producing complete muscular relaxation. I would like to hear the experience of those present on this point, but I have always found it so in practice.

The question arises as to what would have been the right course of treatment if we could not have dilated sufficiently to apply forceps. Dr. Sweetapple, to whom I feel much indebted for advice and assistance in this case, and I came to the conclusion that there were two courses open to us. One was to leave the case for some time in the hope that the os and cervix would finally soften and dilate, and that then we could apply instruments or let delivery take place in the natural way. Against this, of course, was the fact that the woman was exhausted, and that bleeding was still going on a little. We could, of course, check the hæmorrhage by gauze plugging, but this is not a very efficient means of controlling bleeding in a case of this sort. The other course of treatment, which I think was the one we had decided upon, would have been to put the patient up in the lithotomy position in a good light, make a final effort at dilatation, and if this was impossible, to make what incisions were necessary into the os to enable the forceps to be applied. We should then have stitched up the cervix and os as in an ordinary Emmet operation.

No doubt some of the members here to-night will have had similar cases, and we shall be glad to hear how they conducted them.

(Read before the South Australian Branch of the British Medical Association.)

In the New South Wales prisons steps are being taken to establish a new system of criminal identification on the lines of the combined Bertillon and Galton methods. A comprehensive criminal register is in course of compilation, and already the anthropometrical lines of a large number of prisoners have been taken.

PLACENTA PRÆVIA.

By H. A. Sweetapple, M.D., B.S., L.R.C.P., &c.,
Adelaide.

DOUBTLESS there are cases of placenta prævia producing abortion in the earlier months of pregnancy which have been unobserved, and cases in which the placenta is situated low enough in the uterus to produce slight hæmorrhage during uterine contractions of the first stage of labour, yet too high to be felt by the examining finger.

The cases, however, which now concern us are those in which the placenta is implanted wholly or partially over the internal os uteri.

The interesting case reported by Dr. Todd, and which I had the opportunity of observing, is in my experience far from common. Here, where I should have expected to find relaxation of cervix and os produced by the loss of blood, the condition was quite the reverse; the lower uterine segment was one of the most unyielding I have met. This state of things also was little altered either by the action of chloral or chloroform. When, however, the os did seem to relax, many attempts were made to insert the forceps, but the rigidity would simply return, as though to mock one. At length the instruments were applied, and Dr. Todd carefully delivered. We both agreed that the labour should be terminated as speedily as possible, and I consider that the proper course was adopted in applying the forceps in this case. Firstly, because, though the membranes were ruptured, and the placenta separated as far as possible, the patient was still in great danger from hæmorrhage, and it was impossible to bring down a foot. Secondly, because it appeared certain that the child was being asphyxiated.

I have notes of a few cases of placenta prævia which I have met with since being in practice, and which may be of interest.

1. Mrs. B., *æt.* 28, living about three miles out of Maidstone, Kent, engaged Dr. Plomley, whom I was assisting in that town, to attend in her third confinement.

One morning, when about full term, a message came to go to the case. My principal asked me to attend. On my arrival at the house about an hour after the message came, I was told that the patient was dead.

I found the woman lying on her back in a large pool of blood, and on examination found the foetus in utero, the os only large enough to feel that the placenta was partially covering the internal os, and the membranes unruptured. On inquiry from the old monthly nurse I learnt

that a sudden hæmorrhage had occurred about 20 minutes before the patient collapsed.

2. Mrs. H., *æt.* 40, in the eighth month of her ninth pregnancy. This case I was called to one night when acting as *locum* in Dunmow, Essex. Considerable hæmorrhage had occurred, which caused much alarm. There was a history of slight hæmorrhages having occurred at intervals since the sixth month. On examination I found the os widely dilated, the liquor amnii evacuated, a partial placenta prævia, and the head presenting. Pains were infrequent and feeble, and hæmorrhage occurring with each pain, the uterus appearing very flabby. I at once applied a tight binder, gave ergot (Richardson's), and terminated labour by applying the forceps.

3. Mrs. B., *æt.* 30.—This patient sent for me at the seventh month on account of slight hæmorrhages occurring every four or five days since the sixth month.

This was her fourth pregnancy. She had pains and hæmorrhage when I arrived. I examined the os, but could not insert much more than the tip of the index finger. I then and there plugged the vagina with boiled cotton wool, and instructed the patient to rest in bed. Four or five hours afterwards I removed the plugs. The os was just large enough to feel a part of the placenta. I again plugged, and on removing these some hours afterwards was prepared to rupture the membranes and turn, but found the hæmorrhage entirely stopped and the os firmly closed. From this time the patient never had a return of the hæmorrhage until at full term, when there was a slight return which was stopped by rupture of the membranes, labour terminating shortly afterwards.

4. Mrs. O'D, *æt.* 27 (her third pregnancy), sent for me at about the seventh month. The patient was losing a great deal of blood per vaginam. On examination the os was found about the size of a crown and was completely blocked by the placenta. On rupturing the membranes the pains became strong; the placenta was partially forced through the os at each uterine contraction, and I had no difficulty, after giving the patient chloroform, in extracting the whole of the placenta. I was then able to bring down a foot, and the rest was easy. The uterus was washed out with 1 per cent. creolin lotion, and she made a very good recovery.

In the four cases I have reported, the first would show how rapidly placenta prævia may prove fatal, and how needful for medical skill when hæmorrhage occurs. The second would remind us, as in Dr. Todd's case, that severe hæmorrhage may continue even though the

membranes be ruptured. The third would show that plugging the vagina will sometimes stop the hæmorrhage and enable the pregnancy to go on to full term. The fourth, that extracting the placenta in cases of complete placenta prævia may sometimes be easier than perforating it with the fingers, as advocated by Rigby.

(Read before the South Australian Branch of the British Medical Association.)

THREE CASES OF MERALGIA PARÆSTHETICA.

By George E. Rennie, M.D., M.R.C.P. (Lond.), Tutor in Medicine, University of Sydney, and Assistant Physician Prince Alfred Hospital, Sydney.

In 1895 Bernhardt published a paper in the *Neurologisches Centralblatt* detailing reports of several cases which presented a curious group of nerve symptoms, viz., disturbance of sensation on the front and outer aspects of the thigh, unaccompanied by any other signs either of central or peripheral nerve lesion. This condition was subsequently described by Roth, and named by him "Meralgia Paræsthetica." Up to the present time not more than about 100 cases of this disease have been recorded, and, so far as I have been able to ascertain, none of these have been reported by British authors. The disease has been chiefly studied by the American and Continental neurologists, and no case has, I believe, been previously recorded in Australia.

CASE I.—This case was referred to me by my friend, Dr. Blackwood, of Summer Hill, Sydney. A girl, *æt.* 19, single, was first seen by me in June, 1900. She complained then of a burning sensation on the outer aspect of the right thigh, with occasional slight swelling of the same leg. She also complained of a burning sensation over a small area about the size of the palm of the hand on the front of the lower third of the left thigh.

Family History.—Her father died of phthisis 12 years ago; mother is healthy; one brother and one sister are healthy; her maternal grandmother suffered from rheumatism, but no others in the family. There is no history of gout, paralysis, fits, or any other nerve disease in the family.

Personal History.—She was a healthy child from birth up till the age of three years, when she had an attack of chicken pox. She also had scarlet fever at the age of five years, and measles at six years. She has had no other illness. There has been no venereal disease or alcoholic excess; and no history of any accident, injury or strain.

History of Present Illness.—About two or three years ago she first noticed some numbness on the outer aspect of the right thigh. This was not preceded by any pain in the back or down the thigh, and she made no complaint of this to anyone; but about 12 months before I saw her she complained to her mother of some pain and burning sensation down the thigh. The pain was so severe at that time that she was unable to get about, and she was considered to be suffering from hip disease. She was kept in bed for three weeks, and during that time all the pain practically disappeared, and she was able to get about and to go to dances, etc., without any discomfort, though she still had the numbness. She remained free from pain for 10 months, but the numbness persisted all the time. Recently she has noticed the numbness and burning sensation on the front of the left thigh.

On examination I found the patient to be a well-developed and well-nourished girl. She presented no appearance of suffering; she had gained in weight, and her temperature was normal.

Nervous System.—She had no headache, and there was no sign of any disease or defect in any of the cranial nerves. Her intelligence was normal, and there were no signs at all suggestive of hysteria. The muscular power was good in all the limbs at all the joints. There was absolutely no pain or limitation of movement about either hip joints. There was no tenderness on percussion of the skull or spine. **Sensation:** The only objective disturbance of sensation was on the right thigh; there was distinct tenderness on pressure along the line of the external cutaneous nerve of the thigh. On the anterior and lateral aspects of the right thigh there was an area of anæsthesia, analgesia, thermal anæsthesia, and Faradic anæsthesia. This area corresponded generally with the cutaneous distribution of the posterior root of the third lumbar nerve. The transition from the area of sensation to that of anæsthesia was sudden and well defined. There was no anæsthesia detected anywhere else. Over the area of the burning sensation on the front of the left thigh there was no objective disturbance of sensation or anæsthesia detected.

The knee jerks were active, but not exaggerated; no ankle clonus; the plantar reflexes were flexor in type on both sides. She had no sphincter trouble, and there were no signs of trophic disturbance.

The heart, lungs and abdominal viscera were normal; urine normal; menstruation quite regular.

On examining this patient a few months later her condition was much the same, except that the area of anæsthesia had extended a little lower down the thigh, and the sensation of burning on the left thigh had disappeared.

CASE II.—A medical man, aged 50, consulted me about twelve months ago in consequence of a numb feeling in both thighs. He was very nervous about himself, as he thought he was in for locomotor ataxy.

Family History.—Both parents died from cerebral apoplexy at the age of 90. There is no history of gout or rheumatism, and no nervous disease of any kind in the family.

Personal History.—He has had good health all his life. He had an attack of gonorrhœa 25 years ago, but no syphilis. He has been in active practice for several years and has taken no holiday. He suffered heavy financial loss in 1893.

Present Illness.—On January 1st, 1901, he was sitting for five hours continuously on a seat on one of the stands erected on the route of the Commonwealth procession in Sydney, but he says he felt no discomfort, and was not cramped in any way; but about a week afterwards he noticed a burning sensation down the left thigh, and on placing his hand on the spot he found it was anæsthetic to touch. He also noticed that there was distinct tenderness along the line of the external cutaneous nerve on the left side. About a month later he observed the same thing on the right side. Since then he has been much worried about himself, fearing the onset of serious spinal cord disease.

On examination I found him to be a well-nourished and well-developed man, and found no evidence of disease in the lungs, heart or abdomen; the urine was normal.

Nervous System.—There was no disease or affection of any of the cranial nerves; no affection of the cranium or spine; no loss of muscular power in any of his limbs at any of the joints. On testing his sensation I found no evidence of any disturbance in the head, arms or trunk. But there was marked disturbance in the areas of distribution of the external cutaneous nerves on both sides. On the left side at the upper and outer side of the upper half of the thigh tactile sensation was not lost, but only impaired; at the lower third of the outer side of the thigh there was complete anæsthesia, and painful sensation much impaired. Heat and cold were only recognised as such after some delay. Faradic sensation was not recognised as an electric stimulation. On the right side, at the lower part of the outer and anterior part of the thigh, there was complete anæsthesia, partial anal-

gesia, and much delayed sensation of heat and cold. Faradic stimulation was not recognised. In addition there was a burning sensation along the line of the nerves on both sides.

There was no loss of muscular sense, and no Rombergism. The knee jerks were normal; no ankle clonus, and the plantar reflexes showed the normal flexor response. There was no sphincter affection, and no trophic disturbance or herpes.

CASE 3.—The third case was that of a man aged 48 years, an engine-fitter by trade, but who had been engaged in laundry work for the past four years. He had extensive tubercular disease of the larynx and lungs, and was practically dying when I saw him. He complained of a feeling of numbness over the anterior and outer surface of the upper part of the right thigh. On examination I found that there was complete anæsthesia and analgesia over the area corresponding to the cutaneous distribution of the posterior root of the third lumbar nerve on the right side. In this region there was also a subjective sensation of formication, but no evidence of any tenderness of nerve trunks. This had been in existence for some months. He died shortly afterwards, and I had no further opportunity of examining him.

Remarks.—Sir William Gowers, in his "Manual of Diseases of the Nervous System," says: "Impairment of sensation in an area on the front of the lower half of the thigh is occasionally met with as an isolated symptom, usually in men in the second half of life. It comes on without pain, and may pass away after months, or may persist for years. The loss is greatest in the middle of this region, but the transition to normal sensibility is well defined. Its origin and nature are mysterious, except that the subjects of it are usually gouty. It seems to have little significance." Again, in speaking of anterior crural neuritis, he says: "Such an affection of the fibrous tissue may be limited to that related to a single nerve, or some other branch of the sacral or lumbar plexus may be the seat of a neuritis like that which underlies sciatica. The anterior crural or a branch suffers most frequently, with resulting symptoms on the front of the thigh or on the outer part. These are chiefly sensory; motor symptoms are seldom conspicuous in cases so limited in area. The outer part of the thigh in the upper two-thirds is a specially frequent seat of pain, and occasionally diminished sensibility. Anæsthesia in this region sometimes develops in a very chronic manner, without pain, as an isolated but curious and enduring symptom, usually stationary when discovered, and apparently the result of a limited neuritis

of chronic form. It seems to have no sinister significance, but has little tendency to yield to treatment."

It is pretty evident that Sir William Gowers is here describing cases similar to those I have recorded above, though he does not use the same name for them, and seems to incline to the view that the symptoms are due to a neuritis or gouty peri-neuritis of one of the branches of the anterior crural nerve, or of the lumbar or sacral plexus. I would emphasise the fact that though it is not a condition of serious import, yet in my first case the symptoms were severe enough to give rise to the supposition that the patient was the subject of hip disease, and she was treated accordingly for a short time; and in my second case the diagnosis of locomotor ataxy was suggested by the patient himself. Hence, I have thought it well to draw attention to this condition so that the error of mistaking it for serious organic nerve disease may be avoided.

In the cases hitherto recorded the etiological factors assigned have been so various that it seems doubtful if there be any real connection between the supposed cause and the pathological condition present. Thus among the causes of this disease are placed the following:—Typhoid fever, influenza, syphilis, pregnancy, alcoholism, gout, exposure to cold, cold douches, the striking of the sword against the thigh in soldiers, etc. In many cases no cause can be assigned. In my first case no satisfactory cause could be elicited, but it is possible that as the girl was much given to dancing, and the nerve appears from a study of the area of disturbed sensation to be somewhat abnormal in distribution, the frequent irritation and compression of the nerve by the fascia of the thigh may have determined a chronic neuritis of the nerve. In the second case the patient was in a low state of health, and it appears probable that the external cutaneous nerves of both thighs were compressed by the fascia during the long occupancy of the seat in what must have been a more or less cramped position, and so a condition of pressure neuritis was set up, just as we get a musculo-spiral compression neuritis from long pressure on the nerve during sleep. These suggestions, however, involve two assumptions. First, that the nerve can be compressed by the fascia of the thigh to such an extent as to cause either actual neuritis or some pathological change in the nerve sufficiently severe to impair its function. Second, that the dissociation of sensations and paræsthesia, which may persist for months or years, may be caused by a lesion of the nerve trunks, which, however, is not accompanied by any trophic change in the skin, or the development of any herpetic eruption;

but which is, nevertheless, severe enough to produce complete tactile anæsthesia.

The pathological evidence available to throw any light on the condition is very scanty. One case has come to autopsy. It was that of a man, 80 years of age, who had been under the observation of Navratski. A spindle form swelling was found in each external cutaneous nerve at the place where it crosses over the crest of the ilium, and in the region of the swelling there were the changes characteristic of neuritis and peri-neuritis, with secondary degeneration of nerve fibres. In other cases, however, in which resection of the nerve has been performed as a therapeutic measure, careful examination of the excised fragment of nerve has failed to reveal any abnormality whatsoever.

As regards treatment, it seems that absolute rest is essential for the relief of the pain. In cases where this is not possible resection of the nerve may be performed with a reasonable hope of cure. No drug treatment is of any material service, beyond improving the general state of nutrition of the system.

[Read before the New South Wales Branch British Medical Association.]

THERAPEUTICS OF THE RÖNTGEN RAYS.

By L. HERSCHEL HARRIS, M.B., Ch.M., Hon. Skiagrapher and Assistant Surgeon, Sydney Hospital; Hon. Skiagrapher, Children's Hospital.

As we all know, the Röntgen Rays, as well as having photographic properties, are possessed of certain chemical properties also, and on this account experiments are being conducted in different parts of the world to test their therapeutic value. After experimenting on a number of cases I have formed the following conclusions:—

Lupus Erythematosus.—The two most common forms in which this disease occurs are the erythematosus and sebaceous varieties. Of these the former is the more difficult to deal with, and a long time is required for treatment. It is questionable even then whether improvement results. The sebaceous form rapidly responds to treatment. As a rule 20 to 30 sittings suffice. Occasionally a reaction occurs producing inflammation of the part under treatment. If due care be not exercised this might even produce alarming effects. I do not consider it essential that any reaction should be produced to effect a cure, for of nine cases of lupus which I have treated thus, five have not suffered any reaction whatsoever.



BEFORE TREATMENT.



AFTER TREATMENT.

CASE OF RODENT ULCER OF NOSE.

ILLUSTRATING DR. L. HERSCHEL HARRIS' PAPER ON THERAPEUTICS OF THE RÖNTGEN RAYS.

The results have been very satisfactory, with the exception of the first case. Then I produced an excessive reaction, and as a consequence the patient did not report herself again for further treatment. One case of the erythematosus variety at present under my care is only progressing moderately.

Norman Walker, M.D., in his book, "An Introduction to Dermatology," referring to this mode of treatment as applied to lupus erythematosus, says:—

"It is certain that the X-rays should only be used with great caution, and only by those who have had considerable experience both with the rays and with the disease. Often a few minutes' exposure sets up a violent reaction, which if improperly treated may result in an extension of the disease. On the other hand this reaction is sometimes followed at an interval by great improvement, and in other cases improvement sets in without any marked evidence of irritation."

Several of the cases mentioned were kindly transferred by Dr. McMurray from the skin department to the skiagraphic department of the Sydney Hospital, and the treatment was carried out under his supervision. I wish to thank Dr. Newmarch, of North Sydney, for a case in a man aged 74 of many years duration, which after treatment appeared to be perfectly cured.

Rodent Ulcer.—Unfortunately I have only had the opportunity of trying the effects of the rays in one case, kindly sent to me by Dr. R. Steer Bowker. This was in a man aged 64, and, as seen by the illustration, involved the end of the nose. It was of several years standing, and had been scraped once. This case rapidly responded to treatment, and after 32 sittings appeared to be quite healed.

Hypertrichosis.—I have tried several cases. The hairs fell out after 15 to 30 sittings, but soon reappeared. In one case I continued treatment, on and off, for seven months, but eventually gave it up in despair, and removed the hairs effectively by electrolysis.

Keloid and Hypertrophied Scar Tissue.—In one case where hypertrophied scar tissue formed after an operation for tubercular glands of the neck I was successful in removing this after three months intermittent treatment with the rays. The *Medical Annual* of this year refers to the case, which was published in the *Australasian Medical Gazette* of April, 1901. Dr. W. H. Goode, who has since seen the case, expresses great satisfaction with the result.

Carcinoma.—I have several cases at present under treatment, and shall report on them on some future occasion.

This embraces my limited experience in the matter, but the results obtained are so gratifying that I feel confident in predicting that the

therapeutic properties of the Röntgen Rays will be much availed of in the treatment of many indolent forms of skin disease.

[Since I wrote this paper—nearly two months ago—I have had eight additional cases of rodent ulcer under treatment, each of which is rapidly responding to the radiations.]

TREATMENT OF CANCER BY RONTGEN RAYS.

By T. G. Beckett, L.R.C.P. & S., etc., Hon. Medical Electrician Alfred Hospital, Melbourne.

[Abstract.]

THE subject that I have the honour to address you on to-night is the treatment of cancer by Röntgen Rays, and before commencing I must ask for your kind indulgence towards me on account of two or three features in my lecture. In the first place, partly in order to make the most of the limited time at my disposal, I shall omit nearly all references to the published work of others, and confine myself almost entirely to my own personal experiences of this matter.

The second point I must apologise for is my presumption in giving this lecture at all, considering my limited experience in this work, and my only excuse is that this subject is so very new that I am not aware of anyone who can claim to have a very extensive experience of it yet. Owing to this fact it is quite possible that some of the opinions that I express to-night I may, after a more extended experience of a few years, be compelled to modify in the light of further evidence. The title of this lecture will naturally provoke the question: Can cancer be cured by X-rays? My answer is this, that by the aid of the X-rays, in easily accessible and superficial cases of malignant disease, we have an undoubted cure which has been proved by many successful cases and by many observers. In regard to more serious cases, where the disease has obtained a deeper hold, such promising results have been already obtained by some, that looking at the very early nature of our experience with this new line of treatment we have good grounds for hoping that, with improved methods and more extended experience, a wider range of possibilities is open to us. Even the present results are not to be despised, for how very many of what are serious and extensive cancers now were once only very small and superficial malignancies; that is, they could have been cured with our present means had they been treated early enough.

There are probably very many who will for many years only regard this new line of treatment as merely another cancer cure—another

added to the long list of hopeless remedies;—and if I can only succeed in showing you to-night that it is something more than this, and convincing you that it is worthy of your serious attention and critical enquiry, then I shall be quite satisfied that I have not wasted my time this evening. At the same time I will endeavour to bring before you in as impartial a manner as I can the disadvantages and difficulties connected with this mode of treatment, as I do not wish to mislead you into supposing that we have an easy method of curing all cancer cases, because, although sometimes a cure is effected with a few applications, and very easily, yet this is not generally the case; on the contrary, as a rule, the treatment is tedious, difficult and somewhat expensive to carry out. These are the most serious drawbacks to it at present.

Now, why should X-rays cure cancer? I will endeavour to answer this question by first mentioning the more or less well-known facts regarding the properties of X-rays, and then the various theories or conclusions that can be drawn from them; and in regard to some of my theories I must caution you that, although I think my facts are all pretty well authenticated, yet I cannot say the same for my theories, which are mainly my own, and I cannot give you any authorities to support them.

The facts on which I am going to explain the action of X-rays are briefly these:—

1. These rays have the power of penetrating all substances in inverse proportion to their density and their atomic weights, and are capable of exerting chemical action after doing so, in this respect being different to any other rays that we are acquainted with.

2. X-rays exert a decided action on living cells, as shown by their action on the human skin, mucous membrane, and any portion of the body. It is quite possible that they also exert a bactericidal action on living micro-organisms, but the evidence on this latter point is at present very contradictory. This is a very difficult question to decide, as, unless the experiments could be conducted under similar conditions to what exist in the human body, merely negative results can have but little value. For instance, even a thin glass cover would be quite sufficient to considerably modify the effects of the rays, and unless the experimenter was experienced in working with X-ray tubes in a state of therapeutic activity—a point I shall come to presently—the X-rays he might use may have little effect.

3. The action on living tissue appears to be first of an exciting or inflammatory nature, and if the action is persisted in long enough the

reaction is of a necrotic character, and ultimately produces extensive and deep-seated sloughing action. In the early stages X-ray dermatitis, as it is called, is very similar in appearance to erysipelas. The action takes several days, a week or more, to develop, being slower in this respect than that produced by the Finsen light, and seems to be of a cumulative character, a point that often makes it very difficult to judge the correct amount of exposure to give.

4. When exposure to X-rays is extended over a length of time it produces an atrophying effect on the skin and appendages, nails and hair. This effect may occur without any preliminary inflammation, and is often seen on the hands of those working daily with the X-rays, especially if they are in the habit of testing their tubes by observing their hands in the screen, although only a few seconds' exposure occur in each case. It also tends to produce a contraction in the capillary circulation, and by means of this fact I have removed from the face those large superficial naevi commonly known as port wine marks. It is quite possible to do this without producing any inflammation, although great care is required to avoid it, and it takes some time and many exposures to do it.

5. I find these X-ray effects vary exceedingly in individuals and in different parts of the body. Briefly, the conditions I have found to influence them are dependent on the health and vigour of the parts, and also the blood supply; that is, any part that is freely supplied with blood, and in a healthy, vigorous condition, is very resistant to X-rays, and will stand a lot of exposure to a powerful tube before any reaction can be produced; and, on the contrary, if the part is in a diseased and weakened condition a reaction can often be produced after a single exposure. I think anything that tends to lower the vitality of any portion of the body renders it more susceptible to this X-ray reaction, and if care is not exercised most violent inflammation, and sloughing even, may result.

6. Now, in regard to the nature of cancer, I do not want to go too deeply into this. There are several here this evening that could probably tell you more about the latest theories than I can; but I think I can safely say that from a histological point of view it consists of a proliferation of cell growth of a very active nature which intrudes itself amongst the healthy and normal cells, and inducing wherever it spreads an extension of the same class of cells. Now, this tissue is characterised like all other diseased tissue with a lower vitality than normal healthy structure; consequently, upon any injury or the slightest cause, it breaks down, sloughs, and sets up suppurative action.

Whether micro-organisms are present and, if so, whether they are the cause of cancer, is, as you know, still a very disputed point. So far as I am aware, I do not think their existence has yet been conclusively proved. Now, these are the main facts on which we have to build our theories to account for the curative effect of X-ray in this disease. The first and most natural explanation is that the action is a bactericidal one, that the rays destroy the micro-organism, and then the cancer breaks up; but as it has not yet been proved that X-rays are capable of exerting such an action, and neither has it been proved that any germs are the cause of cancer, it is a theory that at present there is no evidence to support; neither do I think that is the true explanation.

I venture to think myself that the effect is due to what I might term, for want of a better expression, the necrotic effect of the X-rays on the cell life, and that the diseased cells possessing a much lower vitality than the healthy, it destroys them first and leaves the healthy normal cells, the diseased cells being ultimately absorbed, and the normal cells going on to reparative action, restore the tissue to as near as possible its former condition. In an excellent article, which you will find in the *British Medical Journal* of May 31st, by Mr. G. N. Lancashire, he expresses a somewhat similar view in these words: "It would appear reasonable to conclude, in the present state of our knowledge, that the good effects of 'raying' are due to the mechanical stimulation of normal cell activity, whereby morbid tissue is either thrown off or absorbed by the healthy. In other words, the process partakes of the nature of an inflammation. It is the control of this inflammation that calls for the nicest judgment." In support of the above views I will mention this experiment that I once tried. I exposed in the same individual, and at the same distance to the X-rays, a small epithelioma, a wart, and a small area of healthy skin; each of these were carefully shielded around with sheet lead. After daily exposures of about five minutes each, the following was the result:—The epithelioma showed the reaction after only two exposures, and started to break down after the third; after that it steadily broke down more and more, forming crusts and peeling away, besides getting very inflamed, till it finally disappeared. The wart resisted the action much longer, and finally seemed to atrophy, but did not get inflamed for a week; and the normal healthy skin held out a little longer, about two weeks, before any reaction was apparent. I think this little experiment illustrates what I mean: the cancer tissue of low vitality perishing easily under the X-rays, but

the normal and healthy resisting for a much longer period. I think you can quite understand, under these circumstances, how a cancerous growth and cancer infected tissue might behave, the unhealthy diseased cells perishing, but the healthy surviving; and that this action, fortunately due to the penetrative power of the X-rays, is not only, as is sometimes supposed, a superficial one, but is carried on, though with diminishing effect, to a fairly considerable depth, although how deep it goes I do not know at present. Even in the case of lupus, which we know to be due to parasitic micro-organisms, I am inclined to believe that this is the explanation of the cure, and not necessarily the destruction of the micro-organisms. That is to say, I think in this case the X-rays destroy the diseased cells that form the host that the parasite lives in, and owing to the death of its host the micro-organism perishes also.

The fact that erysipelas has been known to cure cancer, and the great similarity between X-ray dermatitis and erysipelas is a very suggestive fact, which I will only just allude to as worthy of further study. Another theory which I will mention, although I do not believe it is the correct explanation, is one founded on the blood supply. There are some who consider the growth of cancer as dependent on or very much influenced by this, and those in favour of this theory will find something to support their views when the action of X-rays on the capillary come to be more closely studied.

The well-marked effect on all classes of cancer of the X-rays, commencing often after the first application, are in the order they take place:—

1. Cessation of pain.
2. Gradual disappearance of the offensive smell.
3. Clearing up of the surface.
4. Cessation of the cancer growth.

This is followed after a few weeks' treatment by—

5. Diminution of the cancer growth.
6. Discharges, if existent, becoming less.
7. Finally, a gradual healing commences at the edges, and the ulcerated surface heals.

There are two other symptoms we get in nearly all cases of cancer, viz., loss of weight and the depressed, nervous, apprehensive condition that these cases nearly always exhibit. One of the first signs of improvement that the patient himself feels after usually only two or three applications is, he says, "he feels a lot better in himself." The loss of weight is usually stopped at once, even in tongue and mouth cases, where much difficulty exists in taking food.

I now come to the particulars of the methods employed, and as most of this will only be of interest to those who have already had experience with X-ray work, I will be as concise as possible.

First, the foundation of the whole treatment is the coil, the source of your electrical energy, and I strongly recommend for this class of work the most powerful class of coil you can command. An induction coil should be regarded as an electrical transformer, the means by which you transform a low voltage with an enormously high one; and the bigger the coil the larger the current you can safely put through it, and the greater the volume or amperage of the discharge in your secondary. Now most unfortunately for this, I think all X-ray work coils are made and sold by the length of spark, and it is quite possible by using very thin wire and other methods known to the trade to produce a coil giving a long spark, and yet the output in the secondary may really be only a poor one. The best class of coil for this work is one with a large primary of low resistance, and a certain proportion of larger wire than is usually used in the secondary, and you will be able to obtain a splendid discharge. I attach some importance to this point, and several observers have come to the conclusion that all coils are not suitable for this work. I usually work with a 20-inch coil, and seldom go beyond 10 or 12 inch spark, though occasionally up to 15 inches. A 10 or 12 inch spark from this coil is quite a different thing from the spark of a 10 or 12 inch coil, and gives off from a powerful X-ray tube a much larger volume of X-ray, which is what is wanted in these cases. I used a mercury break of the McKenzie-Davidson pattern, which is very adjustable in many ways and gives a great variety of speed. The electrolytic break has been used with much success by some workers, but I should anticipate considerable trouble in maintaining the most suitable vacuum in the tubes, which is always a great difficulty and is a most essential point. I work with a voltage of from 8 up to 20, according to the effect I am trying to get, but the point that requires watching most carefully is the actual amperage passing through the coil. I usually use from 5 or 6 up to as much as 12 and even 15 amperes, which is a much larger current than usually used. I always run the current through an ammeter in series with the coil, and by watching that can tell pretty well what effect to expect. The current I obtain from accumulators, by far the steadiest and most reliable current to work with. I cannot recommend primary batteries for this work; they are not constant, and run

down considerably after two or three minutes' consecutive work. The greatest difficulty is with the tubes, and if there is any secret in the success it lies with this. Most of the work has up to the present been done with X-ray tubes constructed for radiographic purposes, and most of these are unsuitable. In the first place more than half of those in common use have very little therapeutic activity; they have been constructed for a very different purpose, and some of these tubes I believe you could give any amount of exposure and get absolutely no result. As a broad, general rule the tube that is most active is generally a new one, a soft tube, or one that has been quite recently exhausted. The reaction is obtained with these most readily, but must be used with greatest caution, as they sometimes produce most alarming X-ray burns. A safe tube to use is one with an equivalent spark resistance of 6 to 7 inches, and deeper penetration can be obtained, especially with a much harder tube. A plan I have adopted is to take a very hard tube and make it very hot over a large Bunsen flame. The tube should be able to stand this and yet not go below 6-inch resistance. If this is run for three minutes, then heat it up once again as hot as the tube will stand. A good reaction can thus be got with much deeper penetration than given by a soft tube. Unfortunately, one of the greatest difficulties is that there is no easy method of judging the therapeutic activity of any tube, and these vary very much, and unfortunately never remain constant for any long period. The great difficulty is that a tube may be too active, and as you may not find it out, and you are giving daily exposures the full effect of which do not show for a week, at the end of this time you are suddenly surprised at the very serious reaction you get. The reverse may be the case, and you may work a week or two and get absolutely no result. You can only judge by your daily experiences, and working with a good variety of tubes, that you have some idea of their relative peculiarities. There are special tubes now being made for this work, and I am trying some. Of course you must use some method of screening. Sheet-lead is the only absolutely reliable material that I have worked with. Lead-foil may often be used if care is exercised, but remember in a long case the rays will ultimately get through it, although this sometimes may be an advantage.

For beginners, the safest rule is to keep the tube at a safe distance. I have never seen any injurious effects follow when you fix the tube at a distance of 12 inches and upwards. The time of exposure I vary, the same as the current, according to the degree of reaction I wish to obtain, from as little as one

minute up to 15 minutes. Cases at first should be treated daily, nothing less is any use—even twice a day would be an advantage; but once the reaction is obtained, and patient on road to recovery, then two or three times a week is sufficient. Finally, I recommend a long period of once a week, which I think does much to ensure against a recurrence. Another feature in my treatment has been this, as you will notice in some of the cases I am going to show you: I have not in serious cases trusted entirely to the X-rays alone, but have been very glad to avail myself of the surgeon's skill. In this way I am convinced I have shortened the case, made the result to be attained easier, and in no small degree contributed to the ultimate success. It might be objected by a superficial critic that on this account I cannot fairly claim these cases as being due to the X-rays. So far as that goes I feel the greatest indifference whether the surgeon or myself takes the credit of the cure. I am quite willing to admit "honours are easy," but at the same time I will ask any experienced surgeon to carefully observe the exact nature of what has been done in the cases I will show you, and he will see that it is of such a nature that no surgeon would dare to perform such a little excision of tissue; the amount cut away is so small that the patient is left in as good a condition as before. As most of you know, if such a kind of operation were done in a similar case without the X-ray treatment, recurrence would be so prompt and rapid that the operation would be worse than useless. I will ask you to take particular note of this when I bring these cases before you.

In regard to the question of recurrence, of course this treatment is far too new to tell yet what our experience is going to be. I will only say that up to the present I have not yet read of any case recurring that has been completely cured; neither have I yet seen it myself. My own opinion is that this will not occur provided that the treatment has been thoroughly efficient and kept up at increasing intervals for some time after recovery. I have not time to go fully into this, but I will just point out this is not such a serious question as it looks, because the position will be totally different to recurrence after an operation when the disease recurs in a worse position than before, and the next operation must be a more serious one; whereas under this treatment the position will be not only no worse, but probably less difficult to treat than before. If you cured it once, probably you could do so again. No one thinks any the less of the successful treatment of acute rheumatism because of its tendency to

recur; it simply indicates further treatment required. It is probable, I think, that the patient will most likely be cured, and in as good a condition as before the attack, but he can hardly expect to be better than that, and as cancer did come on once it proves the existence of a cancer diathesis, and therefore he must stand a certain risk of getting it again. I quite expect to hear of cases recurring, because it must happen sometimes that the treatment is not efficiently applied nor continued for sufficient length of time. So I should not take too much notice of solitary cases recurring. Time and experience can only prove what will happen in the majority of them.

I will now conclude my lecture by bringing under your notice a few selected cases in which this treatment has been successful, and also a few still under treatment; and in regard to some of these cases I must in justice observe that whatever success I have attained is in no small degree due to the valuable advice and surgical assistance that I have received from Mr. O'Hara and Dr. Cooke, who have all through shown the keenest interest and readiness to help me in the treatment of these cases, and I must admit that but for this help I could not have undertaken cases of so serious a character by means of this treatment alone. I have also to thank Dr. Kelvington for the trouble he took in preparing the microscopic specimens, and his careful reports on the same, which perfectly accorded with the histories of these cases. In regard to the diagnosis of all these cases, they are all, in my opinion, undoubtedly cases of cancer; in most of them the diagnosis is beyond all possible dispute, and where any room for question of diagnosis exists, I have endeavoured by the aid of microscopical examination of experts to obtain all the possible evidence on this point. I will commence with rodent ulcer, which, as you all know, is now generally recognised as of a malignant nature, and I would remind you that this was the first kind of these classes of diseases to be treated by X-rays, and so far with uniform success.

A.B.—This case was sent me by Dr. Cooke. The patient, aged 75, in very feeble health, with a typical rodent ulcer of five years' duration over the left temple, about the size of a sixpence, and exactly over the anterior branch of the temporal artery. The patient was not in at all a favourable condition for getting any ulcer to heal, and his case proved a very obstinate one; over 70 or 80 applications were required, and at last I got it completely healed up. The treatment lasted from January 11th till the end of March. It has remained perfectly healed ever since, and, as you see now, the ulcer has quite disappeared.

C.D.—This was a similar case of rodent ulcer, in the left side of the nose, extending to the corner of the eye. His age is 42, and the ulcer had existed for over six years. He did not receive more than a dozen applications from me in all. It healed without any difficulty; the only thing that occasioned him any trouble at all was the remedy, and you will see the effects in his case. Although he has quite recovered now, I would like to direct your attention to the present condition of the skin on that side of his face. This case should act as a warning to anyone who may imagine that X-rays are a mild sort of remedy.

E. F.—The patient, an old man over 70, came to me with a small suspicious growth forming just under the front of his tongue in the frænum. It was just in that doubtful stage that no one would care to say what it was, except, taking all the symptoms and facts of the case into consideration, it seemed most probably malignant. I only gave him one strong application of the rays, and that is more than a year ago, and not having the confidence in it then that I have now I did not care for the patient to run any risk, but sent him back to his medical adviser, Mr. Rudall, with a view to having it removed, intending to apply the X-rays again afterwards. Mr. Rudall took such a serious view of the case that he was inclined to remove the whole tongue, as he told me in his experience these partial operations on the tongue were always failures. The patient was so strongly adverse to losing his tongue that he consented merely to remove the growth, and he did so. I have never seen the patient since, but I learnt on enquiry a few days ago that there has been no return of it. I attached but little importance to it at the time, but I have had two very similar cases since, which, having only recently occurred, are not so suitable for my illustration; but in both these cases two or three applications seemed to quite clear up all appearance of the malignancy, and it quite disappeared, and I now can see nothing impossible in one strong application of X-rays to an early and doubtful malignancy and acting in this manner, *especially if the growth was removed at the same time.* Now, my moral is this, and this I take to be the key of the whole difficulty: I believe all cancers have an early stage in which the growth is very small and malignancy is in an undecided state, or rather, I mean, cannot be determined positively in diagnosis. Now, I am convinced that in all these cases where it is so situated that the X-rays can be effectively applied that an easy cure could be effected and the patient would never know for certain whether it was malignant or not; very unsatisfactory from a

diagnostic point of view, but a lucky thing for the patient. What I do feel keenly is this: the sad, hopeless cases that are sent to me of advanced cancer being operated on once and recurring badly—these I look upon now as quite hopeless, yet, perhaps, 12 months or two years ago what a very different result this treatment would probably have effected. A case of cancer cannot possibly be treated too early by X-rays, and if well advanced I must tell you it is well-nigh hopeless.

G.H.—This patient, a man of 65 years, had an ordinary epithelioma on the end of his nose completely removed by Dr. Schlessinger about two years ago. It returned in last December, and grew vigorously. His brother died of cancer, and he has a bad family history in this way. When sent to me by Dr. Schlessinger, at the beginning of July, he had an epithelioma growing strongly, although being treated with escharotics; the surface was partly burnt down, but it was still the size of half a walnut. It presented such a striking appearance that I asked him to have it photographed, which unfortunately was done by an amateur, and I fear the result a failure. I forgot to mention there were nodules of the disorder disseminated through to skin nearly over the nose, and barring the X-ray treatment there was no other course left but the removal of the entire nose, which probably would only postpone the usual inevitable end. In one or two ways it was not a favourable case, and was a recurrent case. On the other hand, it was most favourably situated for this treatment. I applied the rays on an average about three times a week, and at first for ten minutes each time, gradually reducing it as the desired reaction was acquired. It has behaved in the usual way of diseased tissue; the cancerous growth broke down, and, as you will see, now has gradually perished. In a short time nothing but healthy tissue will be left, and I shall then allow it to heal up. I regard it as practically cured now.

H.I.—This is a woman, aged 45, from whom Dr. Cooke removed a small epithelioma on the end of her tongue in February of this year. It started to return about June, and I saw her first on July 12th. The scar of the former operation had healed well, but evidence of recurrence in this scar was unfortunately apparent, and the patient felt a return of the uneasiness in the tongue. I gave her a few preliminary exposures, and Dr. Cooke operated again in July, removing only a very small portion—nothing appreciable—and since then I have been treating her with the X-rays. Giving it her rather strong, the reaction has been somewhat severe, and it is too soon yet to be able to pronounce on the success or otherwise of the

treatment. I quote this as a typical case of what may be done if we can only succeed with this treatment; that is, instead of a serious operation of removal of the whole tongue, a comparatively trivial one of this nature. I will take this opportunity of saying that I do not at present take a too hopeful view of tongue cases; they are not the class of cases that I prefer for this treatment.

J.K.—This is a man aged 47. I was asked to see him by Mr. O'Hara on May 28. He appeared to be suffering from a cancerous growth, inside on the lower jaw, on the left side. It was evidently of the nature of an epithelioma, and the glands were considerably enlarged. One point in his favour was that it had only existed a few months, but was rapidly spreading. Mr. O'Hara contemplated removing a portion of the jaw as evidently the best thing to be done, but before doing so asked me to give the X-rays a trial. Before commencing I took a small clipping of the growth, which was kindly examined for me by Dr. Kelvington, and pronounced to be epithelioma, and in a very active state. My own opinion is strongly that, if the case had been left to the usual course of events, at the rate it was progressing all doubts would be very soon removed. I gave him preliminary treatment with the X-rays, and it progressed most favourably. On June 12 Mr. O'Hara removed the enlarged and infected glands, and also scraped and curetted the jaw bone, and after a week I resumed the X-ray treatment. The case progressed most satisfactorily towards recovery, the mouth completely healing up, and the malignancy disappeared entirely.

H.I.—This case was sent me by Dr. Hodson, a man about the same age as last, but the disease has existed nearly three years, and this has made the case almost a hopeless one. It was epithelioma of the tongue. About one-third of the tongue on the left side was already gone, as if cut out by a gouge right down far back to the root of the tongue. I started the treatment on July 1st, and from the first it soon began to put on a healthier appearance, and the foul and characteristic smell disappeared almost entirely. This is a common and hopeful sign in these cases. I followed a similar line of treatment as I did in the previous case, and on July 24th Mr. O'Hara operated and removed the sub-maxillary glands, tied the lingual artery, which was nearly ulcerated through, and merely curetted the tongue. I resumed treatment a week after, and the present position is this: The wound has healed well, and the side of the tongue is now nearly healed up. I have here sections of the tongue and glands, kindly made for me and examined

by Dr. Kelvington. In his report both the tongue and glands give evidence of epithelioma of long standing, which exactly corresponds with his unfortunate history.

J.K.—This is another similar case. A man aged 53 originally sustained a crushing accident on his head, and last year a small malignancy formed under his tongue, for which he was attended by Dr. Duncan in 1901. In October, Mr. O'Hara operated and removed it, but it returned so badly that he removed the entire floor of the mouth, dividing the jaw at the symphysis on May 19th. It returned again rapidly, and Mr. O'Hara sent him to me at the end of July. I then found him in a very hopeless state, and I hesitated to attempt to do anything for him, it looked so utterly hopeless. The whole of the region under the jaw seemed a mass of malignant disease. Discharged large quantities of foetid pus and blood through the opening in the old wound of the last operation, which was breaking down, and small portions of malignant growth sprouting out through it. Apparently another month or two at the farthest would see the end of the case. However, at Mr. O'Hara's earnest request I said I would try the effect of the rays on it, and the improvement was immediate and decided from the very first. I started on July 21st and gave it to him every day. The discharge lessened, and to my surprise the growth steadily subsided and got smaller and smaller. Small pieces of bone came away. I took a skiagram of the symphysis of the jaw, which you can now see, and the condition disclosed and the improved state of affairs encouraged us to think the case was not so hopeless after all. Some days ago Mr. O'Hara again cut down on to the symphysis of the jaw, which seemed to locate the seat of the disease, and removed only the silver wire suture, which you see in the skiagram, and a small piece of necrosed bone, both which I have here. That is all that was done except that whilst under chloroform I gave the ends of the jaw a thorough exposure to powerful X-rays for about ten minutes, that is, right into what appeared now to be the seat of the disease, and the wound was then closed up. So far the result seems to have been most satisfactory; the wound has healed by primary union and has a healthy appearance, and there has been no discharge from it since; and the patient says he feels so much better that he feels as if he ought to go to work. In this treatment one of the most striking facts I have noticed is how directly the advance of the disease is arrested, even although the difference cannot be seen by the patient. Now he expresses himself as feeling remarkably well and different to what he was for a long time pre-

viously. It is premature to say much about the future prospects of this case, but owing to the marked and steady improvement that has taken place since I commenced treatment in July, there are now reasonable grounds for hoping for a successful result. So far as I am aware this is quite a new method of applying the treatment as I used it in this case. Whereas at present the surgeon removes not only the malignant growth, but as large as possible an area beyond, in order to ensure a satisfactory result, in future what I advise is this: If the growth is only small, superficial, and has not existed for long, then it will probably clear up under the X-rays alone. If it does not, or if it has existed for long, and is of any appreciable size, then I advise cutting out the cancerous tissue only and exposing at the time of the operation the seat of the disease whilst under chloroform to as powerful a source of the X-rays as possible the open wound for ten minutes or even more, in fact up to the limit of safe endurance, and this is a point that can be only determined by actual experience of many cases, then closing up again and treating afterwards with daily and similar applications of the rays.

(Read before the Victorian Branch British Medical Association.)

A CASE OF COMPLETE ONE-SIDED GIGANTISM WITH ENLARGEMENT OF THE OPPOSITE SIDE OF THE BRAIN.

By C. Reissmann, M.A., M.D., B.C. (Camb.), B.Sc., M.R.C.P. (Lond.), M.R.C.S. (Eng.), Adelaide.

SEVERAL cases of defective growth of the whole of one side of the body are on record, and these have been found at the autopsy to have been associated with deficient development of the opposite side of the brain. But the reverse condition, that of one-sided overgrowth, including enlargement of the opposite cerebral hemisphere, is certainly one of the utmost rarity.

The subject of this condition, which is exhibited to the Branch to-night, is an infant aged seven months, a boy, the youngest of a family of three. His mother, who is a healthy woman, and is present with her child to-night, attributed her child's deformity to a shock which she received at the sight of a friend who had been accidentally killed. This occurred at the time when she was two months pregnant. Her nine months of pregnancy differed but little from the previous ones, with the exception that on this occasion her abdomen was unduly large—larger than it was during the previous pregnancies. At the fifth month, and again at the seventh month, the mother tells us there were some false labour pains, for which she obtained medical treatment.

There was some difficulty in labour owing to the large size of the child, who was delivered by forceps by Dr. Wigg, the mother having been in labour nine hours.

Beyond observing that he was a very large baby, nothing particular was noticed about the child at birth, but he weighed 14 lb. On the fifth day after birth the right leg was first seen to be rather larger than the left; then it was noticed that his right arm was larger than the left, and the right cheek larger than the left cheek. When five months old the child weighed 28 lb. The child is nursed by his mother, and is carried equally often in the right and left arm. Posture has nothing to do with the deformity.



At present he shows well-marked deformities (they are much more evident than appears from the accompanying photograph). The left side of the cranium (including the frontal, parietal, temporal and occipital regions) is much larger than the right side. The anterior fontanelle is widely patent, but it does not bulge externally. The posterior fontanelle is just patent. There appears to be slight proptosis of the left eye. The pupils are equal, and both react readily to light. The ears are of equal length. The right cheek, jaw and gums are distinctly larger than the left. There are no teeth. The right side of the tongue is very greatly enlarged, and when the tongue is protruded it deviates to the left, obviously owing to the great bulk of

its right half. The right shoulder, arm, forearm, wrist, hand, fingers and nails are much larger than the left. Deltoid tubercle of acromion to end of styloid process of ulna right side measures 20 cm.; on left side, 17½ cm. The enlargement appears to include skin, subcutaneous tissue, muscle, and certainly also bone. Little difference is to be noted in the size of the two sides of the chest: the chest appears to be well formed and normal. There is no transposition of viscera. The right side of the abdomen is slightly larger than the left; this is more particularly noticed in the skin and the subcutaneous tissue, which forms a loose fold above the right Poupart's ligament; not present on the left side. There is an umbilical hernia. The right buttock, leg, foot, toes and toenails are very much larger than the left. The difference in size of these parts is very striking. The right leg is not only larger but longer (by about 5 cm.) than the left. The enlargement appears to affect skin, connective tissue, muscle and bone. There is no paralysis of any muscle, and the muscular tone is good and equal on the two sides. The child is, however, more clumsy with the right side, and if he attempts to reach out for an object with the right arm the movement is less decided than it would be if the left arm were used. The knee jerks are present, but are less readily obtained on the right side than on the left.

There is then an enlargement of almost the whole of the right side of the body, together with the opposite (left) side of the cranium, and, therefore, also of the left side of the brain; and, one may infer, also an enlargement of the right side of the spinal cord. For it is inconceivable that the enlargement of the brain is due merely to a neuroglia overgrowth; it is far more probable that the nerve cells and their axis cylinders—the upper neurones—are enlarged; and, if the upper neurones, probably also the lower ones.

(Read before the South Australian Branch of the British Medical Association.)

RECORDS FROM GENERAL PRACTICE.— CASES OF ABORTION.

By J. A. Cameron, M.B., B.C. (Camb.), Ipswich,
Queensland.

DURING those halcyon days of one's medical career, when one is walking the wards of a hospital as dresser, clerk and house officer, it appears to be vastly important to know all about the latest and most wonderful feats of surgery, and all the curiosities of medicine and bacteriology; but when one gets into general practice it is soon discovered that it is not these things that occupy much time and attention,

but the more homely questions of diagnosis of sore throats, of rashes, of phthisis, the treatment of broken limbs and so on, and one is sometimes tempted to wish that the years at the hospital had been somewhat differently spent. Among those common cases that frequently require careful consideration and treatment, and of which we see little at a general hospital, and with which we all have to deal, are miscarriages or abortions.

Doubtless my own experience is similar to that of many others. Shortly after getting my degree I went to act as *locum tenens* for a man with a large practice. One of my first experiences was to be called to one of his best patients, who was said to have miscarried at about the second month. I was shown, wrapped up in a diaper, what then appeared to me a very extraordinary-looking lump of tissue, as I had never seen anything of the kind before. The lady herself, probably more experienced than I then was, said she thought it had all come away. I readily agreed, and fortunately for both of us it had, and in a week's time she was well again.

On starting practice for myself, I soon found that such experiences multiplied, and I began after a time to make notes of these cases. In this way I have collected short notes of 96 cases, a brief analysis of which I bring before you for your consideration to-night.

In doing so, I may say that my object has not been to make out that my methods and results have always been the best, but simply to give my impressions founded upon the experience furnished by these cases, and not gathered at all from books, hoping to receive many valuable hints from members afterwards for my better guidance in the future. There are certain parts of our work of which this is one, such as the giving of anæsthetics and the management of labour, in which we all get considerable practice, and form decided opinions, even to each one thinking that he does these things better than most other men, so I hope to hear many opinions and suggestions to-night.

I take, then, abortion to mean, "the arrest of gestation, and the expulsion of the embryo at a period antecedent to its viability—that is, before the end of the sixth month."—Rentoul. And, of course, an abortion is said to be complete when both embryo and membranes are expelled, and incomplete when the embryo is expelled and the membranes are retained. An abortion is concealed when the embryo perishes in the uterus, and when both it and the membranes are retained, and expelled perhaps some months later. Four out of the 96 were of this nature.

Causation.—The causes divide into four groups—criminal and maternal, foetal and paternal causes. I do not, however, propose to enter into them in detail. I think there can be little doubt that the bougie or ladies' silent pills account for the greater number. Maternal causes may be general, such as fevers and other diseases, and local, for example, fibroids, endometritis following induction, inflammation following attempts at prevention, and lesions and displacements of the uterus. The foetal and paternal causes are many in number, but not so frequently met with as the two former groups. Herman gives 20 per cent. as the normal frequency of abortion to labours at term. An American writer, quoted by the *Lancet*, gives the proportion as ten miscarriages to 27 labours in native-born American women, and the same proportion among negro women. Other authorities variously estimate the frequency from 1 in 4 to 1 in 80. My figures are not sufficiently large to draw any conclusions of value, but I am inclined to think that 1 in 4 does not over-estimate the frequency here. Multiparæ abort more frequently than primiparæ, as is to be expected. Eleven of my series were first pregnancies. The second and third months seem to be the period at which most cases occur; 57 out of 96 took place then.

Symptoms.—The symptoms vary greatly with the stage of pregnancy, and the condition of the foetus and placenta. Shortly after the first month the bleeding is not usually great in amount; at the third and fourth month it usually continues from beginning to end of labour; at the fifth and sixth month a discharge of liquor amnii frequently takes place, and, generally speaking, the more advanced the pregnancy the more closely it resembles labour at term. If sudden violence causes abortion, there is often as a first symptom a great gush of blood, in which the ovum may escape, a sharp pain being felt at the time.

It is well to remember that before the end of the second month, the placenta not being formed, hæmorrhage is from the entire uterine surface, while at a later period it is from the placental site. This point ought to be borne in mind in treating the cases. Hæmorrhage may begin before or after the pains, and free hæmorrhage is generally accompanied by strong contractions.

A foetus may die and be retained for several days or even weeks. In one of my cases the foetus apparently died at the fifth month and was retained till term. I will refer to this case again later. The expulsion of a dead foetus is generally slower, with less loss of blood, and with slower involution of uterus afterwards.

The ovum may be expelled in a mass during the second and third months, but after the fourth month the embryo is generally expelled and the membrane retained for some time after. I have known women at this stage to walk about for three or four days with the placenta in the womb after the foetus has been expelled. In any case the placenta is usually retained longer in abortion than in labour at term.

Having during the last five years known of three cases, in two of which extra-uterine gestation without severe symptoms was at first mistaken for a miscarriage, and another in which a miscarriage was diagnosed by two men as a tubal pregnancy till the embryo came away, I do not think it superfluous to mention that we should ever remember the possibility of confounding the two conditions; for in extra-uterine gestation, also, bleeding from the vagina with expulsion of decidual tissue is often accompanied by the pain of uterine contraction, as in abortion.

Results and Treatment.—The two great immediate dangers to be apprehended are loss of blood and septic poisoning, with its long train of possible evils. The more remote dangers, such as subinvolution of the uterus, I do not intend to touch upon.

Bleeding may be profuse enough to cause grave primary anæmia, or if prolonged may in that manner undermine health. Primary severe hæmorrhage cannot always be prevented. Four of my cases were blanched from loss of blood from a sudden copious hæmorrhage before I was called in. I do not propose even to mention the various septic troubles that may arise, or their treatment, as I have been fortunate enough to have very little experience of them, and they were most thoroughly expounded here not long ago. In abortions even more than in labours at term I believe we ought to be free from the supervention of sepsis. Except in a few cases of criminal abortion instrumentally induced, we are free from what I believe is the chief cause of puerperal sepsis: the examining finger of a dirty midwife. Few doctors nowadays are so careless or ignorant as to neglect proper surgical cleanliness in their obstetric work, but in country practice, at least, it is almost impossible to prevent the woman in attendance from making vaginal examinations before sending for the doctor. Fortunately, she does not often do so in cases of abortion. Three of my cases had a bad-smelling discharge, with high temperatures, when I was called to them first. I had reasons for suspecting that they had all been self-induced, but all improved rapidly when the uterus was emptied. Only one case of the 96 became septic after beginning treatment, and that was the case referred to

above. A woman who had had eight children, the last one stillborn at term, became pregnant in January, 1899. The abdomen went on enlarging till May, when she thought she felt slight foetal movement twice. No further increase in size took place, and in July, *i.e.*, two months later, slight bleeding began, and gradually became more profuse, with passage of "stuff like skin," to use her own words. This continued till September, when, the nine months being past, she became alarmed. The uterus then was at the level of the umbilicus, and felt like a five and a half months' pregnancy, and had been so for four months, and the os admitted two fingers. She had come a long way and was anxious to be dealt with promptly; so under chloroform an attempt was made to empty the uterus with indifferent success, as the foetus and membranes were soft, and broke up in pieces. Prolonged suppuration and a serious illness followed. The uterus appeared to be converted into an abscess cavity, which discharged pure pus from the os whenever the douche tube was inserted, and which finally emptied itself by a spontaneous opening in the left groin. She, however, recovered completely, and in May of this year was delivered instrumentally of a healthy child at term with a normal lying-in. No other case had a rise of temperature after emptying the uterus thoroughly.

Of the 96 cases, 30 were complete abortions, 37 were instrumentally completed, 13 digitally, 13 by rest in bed with ergot, or ergot with plugging the vagina, two were induced by me, and one is not included.

Take the last three first. In discussing a doctor's duty in inducing abortion in difficult cases, the *Lancet* for January 1898, says: "When the patient's life is necessarily exposed to great danger if the pregnancy is allowed to continue, it is proper to terminate it after adequate consultation"; and this seems a safe rule for guidance. Both my cases were about the third month. One was a woman with a large intramural fibroid, which grew rapidly during pregnancy. I do not intend to discuss whether one is ever justified in inducing labour when a fibroid is present, but will simply say that labour had twice before been induced by other men for the same condition, that she refused operative treatment of the tumour, that she suffered sufficiently to make her desire relief although anxious to have a child, and that the opinion of three other medical men was obtained.

The other patient's state of health was such that a distinguished Brisbane practitioner had previously removed both her ovaries to prevent her becoming pregnant. As she persisted in doing so in spite of his skill, and her health

still being bad, after adequate consultation it was decided to induce. In connection with this case, a paper by Doran, in Vol. II, No. 1, of the *British Obstetrical Journal*, entitled "Pregnancy after removal of both ovaries for Cystic Tumour," is of interest. I am now inclined to think that my first case would pass the *Lancet's* standard, but not the second, and blame myself accordingly.

The one case put by itself is the only other the notes of which I shall trouble you with. A young woman, anxious for children, had four times miscarried. Becoming pregnant a fifth time, the uterus enlarged gradually to the umbilicus, but she had several severe bleedings during the time, especially about the second and third month. She believed she felt foetal movements. Her figure was that of a woman about five or six months pregnant. No further enlargement took place, and about a month after, what she thought was her full time, she consulted me. A rounded fairly solid body, somewhat ill-defined, and slipping about under the hand, could be felt through the abdominal wall, about the size of the foetal head at term, lying in the middle line, and reaching almost to the umbilicus, the hand dipped in above the pubes meeting with very little resistance. By the vagina, the cervix was felt not shortened or softened, and the lump could not be definitely made out as closely attached to the cervix. About three months after the lump was much smaller and harder to feel. Then after seven months amenorrhœa, irregular bleeding started again, ending after four weeks almost continuous bleeding in a flooding, with the passage of a fleshy bag 3 inches long by 2½ inches across. The walls were about one-third inch thick, the surface was rough, and it contained clot and a small shrivelled foetus. It was fresh and had no bad smell. It was passed about 20 months after she thought she had become pregnant. The specimen was preserved for further examination, but unfortunately was destroyed by mistake. This appears to me to be an instance of the fleshy mole described by Berry Hart in Vol. I, No. 5, of the *British Obstetrical Journal*. He describes it thus:—"A thickened fleshy-looking structure averaging 6 cm. in diameter and 1.5 cm. in thickness. It is evidently placental in nature, with a rough shreddy aspect. It is sometimes expelled as a pear-shaped mass made up of placenta and reflexa. When laid open a small foetus is often found." He goes on to say: "The symptoms are quite distinctive. The patient has the symptoms of early pregnancy, and then of threatened abortion during the second or third month. She usually imagines she has escaped miscarrying, but the uterus does not increase

in growth. She remains amenorrhœic, and finally expels such a mole as described above, 5, 8, 11 or even 18 months after conception."

There were 30 cases of complete abortion, and these required no active treatment. The number is high, owing to cases up to the end of the sixth month being included. It is a serviceable rule for guidance that so long as hæmorrhage continues there is something in the uterus.

In incomplete cases, theoretically the ideal treatment is undoubtedly to put the patient under an anæsthetic, dilate the cervix, clear out the uterus thoroughly with finger, and curette, and flush the cavity well out. However, it is not always expedient or even possible to do this at once, and often we have to quickly decide whether to attempt to empty the uterus at once or to temporise.

In 13 cases I used drugs such as ergot and quinine alone, or with a vaginal plug. My slight experience of plugging the vagina and giving ergot makes me disposed to try it more often in the future. It certainly checks hæmorrhage almost completely in the earlier months, and sometimes on removing the plug after 24 hours the contents of the uterus are found in the vagina, or the cervix dilated enough to allow curetting to be done if all the decidua has not come away. It is especially useful if there has been severe hæmorrhage and the cervix is closed. Four cases were blanched and with an almost imperceptible pulse beat when I was summoned, and to use then prolonged efforts to empty the uterus would have resulted in disaster. In such cases the plug is very valuable, checking bleeding for 24 hours till the patient recovers sufficiently to stand further handling. In giving ergot alone a hint received from a brother practitioner is worth remembering. He gives it in doses of from ʒii . to ʒiv ., perhaps two or three times, instead of small doses more frequently, and the results are sometimes excellent.

If the os uteri is dilated and there are frequent expulsive pains, it is better to empty the uterus without wasting time. In 13 cases the uterus was emptied by finger only, and in 37 cases the curette was also employed. No hard and fast rule can be made as to which should be done. One authority, indeed, lays it down as a cardinal principle of uterine surgery that when once you have entered an aborting uterus you should never leave it until it is thoroughly cleared out, adding that this cannot be done by the finger alone, and that in all cases an anæsthetic should be employed. Personally, I try what I can do with the finger first, making counter pressure on the abdomen with the other hand, and if not satisfied I curette as well.

The curette has this advantage, that it can quickly be made absolutely aseptic, which is more than can be said for the finger, and it certainly removes decidual *débris* more thoroughly, and it can also be used when it is not desirable to wait for a sufficient dilatation to admit the finger. It has this disadvantage, that if we rely on it alone, in cases where dilatation has not been carried on sufficiently to admit the finger, we shall frequently leave behind great masses of placenta. Tarnier relates a case in which curetting was performed after abortion, when next day, to the surprise of the operator, a fœtus was passed. If the finger is not used to explore, this mistake may happen. I have known of a similar case.

I do not wish to revive the somewhat stale discussion as to whether a blunt or sharp curette should be employed. I always have both in readiness, and find the blunt one usually sufficient if called on at the time, and the sharp one may be required more often if some days have elapsed since portions of decidua were passed.

The chief point is to thoroughly empty the cavity of the uterus. The method of doing so must vary with the circumstances, but the finger should be introduced whenever possible as the final arbiter of all being clear inside the uterus.

In the limited means of reference at my disposal I have come across two sets of cases published with reference to treatment. The American Year Book for 1901 gives a list of 300 cases, excluding all over the end of the third month. Of these the uterus was emptied by the finger in 246, and in only 54 instrumentally, only 19 being complete abortions.

On the other hand the Rotunda Hospital report for 1901 records 286 cases, of which 200 were curetted, a proportion to which my smaller figures approximate. In the discussion on the report in the Dublin Royal Academy of Medicine opinions differed greatly as to when curetting should be done, or even whether it should be done at all, and two such authorities as Drs. Smyly and Penefoy both advocated the use of a blunt curette.

In the after-treatment the main point is to insist upon sufficiently long rest in bed. Lawson Tait, indeed, says that persistent menorrhagia is oftener due to subinvolution of the uterus than to retained lumps of placenta. Subinvolution is more likely to occur in an immature uterus than in one in which pregnancy has gone on to term.

In this place I may mention the question of perforation of the uterus with the curette. The accident has happened, and seems almost free from danger if the operator recognises what has occurred and desists from further

treatment. I have known a medical man to push a Hegar's dilator through into the abdominal cavity while attempting to dilate the cervix, so that I suppose such a one might also perforate the uterus with a sharp curette. It has, however, always puzzled me how any one could perforate a fairly healthy uterus if ordinary care was taken. Therefore, an article in the *British Medical Journal* for May 31, 1902, in which the passage of a sound along the Fallopian tube has been demonstrated, is interesting in the suggestion that the cases of so-called perforation by curette may be of this nature also.

The last point I wish to touch upon is, "Can the progress of threatened abortion be arrested, and how are we to decide whether to attempt it?" In the cases reported I endeavoured to do so in the early stages of some, with, of course, failure; but I have also notes of 21 additional cases in which bleeding occurred in fair quantity on one or more occasions during pregnancy, but which seemed to recover on appropriate treatment and proceed to term. I have not found any particular trouble with the placenta at the subsequent labour in these cases. The treatment has consisted mainly of complete rest in bed and drugs, of which opium and its derivatives are the best, also vibronium and bromides, with treatment of obvious exciting causes and careful regulation of the mode of life on getting up from bed. The matter is difficult, as doubtless most women are rather glad than otherwise if they do miscarry. In some cases it is obvious that abortion cannot be prevented. If the membranes have ruptured, or if there is a foul vaginal discharge, or if the fetus is dead or diseased, abortion is inevitable, and the sooner it is over the better for the mother. If the mother is ill with any fever or inflammatory trouble and abortion threatens, it is rarely averted. In a healthy woman, pains are of more serious import than loss of blood; as a rule if pains are severe they are not usually checked, whereas bleeding may last several days without the pregnancy being disturbed. However, the quantity of blood lost and the length of time of flow to some extent correspond to the amount of separation between the uterus and placenta. Vaginal examination helps somewhat. We note the amount of dilatation of the os and whether any part of the embryo can be felt presenting. Tarnier points out that if the well-marked line or depression usually felt between the body and neck of uterus disappears there is no hope of arresting the progress of abortion.

Habitual abortion does not seem to prejudicially affect a woman's health. Four women

who habitually aborted were successfully piloted to full time by regulating their habits, and by giving pills of asafetida as recommended by Whittle; but although successful in these four, the drug alone possibly is not responsible; it certainly seems worth a trial in such cases. Of course any obvious exciting cause must first be dealt with.

Gentlemen, these are the impressions formed from my own cases from day to day. If my modest paper provokes a good discussion and expressions of opinion by more experienced men, my chief object in reading it to-night will be fulfilled.

(Read before the Queensland Branch of the British Medical Association.)

MIRROR OF HOSPITAL PRACTICE IN AUSTRALASIA.

PRINCE ALFRED HOSPITAL, SYDNEY.

A CASE OF RAPIDLY-INCREASING ANÆMIA, WITH IRREGULAR PYREXIA.—DEATH.

(Under the care of Dr. Scot Skirving, Hon. Physician.)

Reported by A. H. Macintosh, M.B., Ch.M. (Sydney), Senior Resident Medical Officer, and J. B. Cleland, M.D., Ch.M. (Sydney), late Resident Pathologist.

A., male, aged 26 years, was admitted to Prince Alfred Hospital December 17, 1901, stating that he had been quite well till five weeks before admission. He first complained of sore throat and toothache. Was treated for his throat, which got well in about a week. Since that time has been getting gradually weaker, and has frequently suffered from frontal headache. His appetite has been variable. He has had no vomiting, and no pains anywhere about the body or limbs. The bowels inclined to constipation. There have been no cough, no "shivering fits," no profuse sweating. He does not think he has lost weight to any extent.

Past History.—He had rheumatic fever five years ago, gonorrhœa six years ago, but no syphilis.

Present Condition.—Patient is not emaciated, but very anæmic. Complexion of a lemon-yellow colour; no jaundice. Temperature, 100.2°; weight, 9 st. 12 lb.

Digestive System.—The tongue is furred. There are one or two bad stumps; rest of teeth good. Throat healthy.

Appetite.—Fair. No nausea; no vomiting.

Abdomen.—No distension; no tenderness; nil abnormal to be felt. Splenic dulness increased. Liver dulness normal. Rectal examination showed nothing abnormal.

Cardio Vascular System.—H.A.B. fourth space just inside nipple line. The mitral, first sound soft; second, clear. Pulmonary, loud systolic murmur; second sound clear. Aortic, first sound soft; second, clear. Well marked bruit in vessels at root of neck.

Respiratory System.—Nothing abnormal detected.

Urine.—1017 acid; no albumen; no sugar.

The blood examination showed red cells, 1,415,000 per cmm.; white cells, 14,000 per cmm.; hæmoglobin value, 26 per cent. The shape of the red cells unaltered. Large number of large leucocytes, with large oval nuclei, and neutrophile protoplasmic granules.

Subsequent Course of Illness.—Patient got steadily weaker. Temperature was irregular, usually about 101°; at times as high 105.4°, and once falling to normal. There were no rigors. Towards the end of the illness patient sweated profusely at night. The urine was pale. Specific gravity ranged between 1010 and 1017. Once it contained a trace of albumen. Amount passed measured on three occasions was 68 oz., 64 oz., 52 oz. No fresh physical signs were developed.

Blood Count 12 days after admission gave—Red cells, 710,000 per cmm.; white cells, 20,000 per cmm. The patient died next day.

Post-mortem Examination.—About a pint of blood-stained fluid was found in the peritoneal cavity. An extensive flat cake of blood, which had issued from a needle prick in the liver, extended over the right lobe of that organ down towards the iliac spine. A slight amount of blood-stained fluid was present in both pleural cavities. The lungs were congested, and oedematous towards their bases; the bronchi full of frothy fluid; the middle lobe of the right lung was occupied by a number of large broncho-pneumonic patches ($\frac{3}{4}$ inch in diameter), separated by vesicular areas. Some recent yellow pleuritic exudation lay over the surface of this lobe. The right organ weighed 39 oz., the left 34½ oz. The heart weighed 14 oz.; it exhibited a few small petechiæ and vibices under the visceral pericardium; the right auricle was dilated; both sides contained soft pale clots; the valves and coronary arteries were healthy; the muscle substance was very pale and soft; microscopically the transverse striation was poor, and nearly replaced by a longitudinal one. The liver, weighing 51 oz., was soft and very flabby, not retaining its shape properly when lying on the table; it was pale but not yellow; the gall-bladder was healthy. On treating the liver tissue with potassium ferrocyanide and dilute hydrochloric acid, it at once assumed a Prussian

blue hue. This was found to be due to a deposit of Prussian blue granules (hæmosiderin) in the liver cells, more especially those nearest the portal systems. The spleen, 11½ oz., was large, soft and dark red. The kidneys, 6½ oz. each, were large and pale, their capsules peeled; they showed some cloudy swelling microscopically. The pancreas, supra-renals, stomach, intestines and bladder appeared healthy. The marrow of the sternum was greyish. There were two or three enlarged, red and very soft lymphatic glands in front of and behind the root of the right lung. In the brain an extravasation of blood about the size of a pigeon's egg was found in the back part of the right temporo-sphenoidal lobe; the cerebral substance around was soft. Some of this blood was quite recent, but in places there was evidence of an older clot in dark, black granules. A small extravasation of blood occurred under the pia mater of the under surface of the left temporo-sphenoidal lobe. The mastoid cells, middle ear, sphenoidal and ethmoidal sinuses were healthy.

In smears from the lungs and spleen, taken at the post-mortem examination 14 hours after death, a number of bacilli were seen of various sizes, and staining irregularly. Extensive whitish growths occurred on agar, chiefly of a large bacillus with rounded ends and irregular staining. Some cocci were also present in cultures from the lungs.

Comments.—This case, in its clinical and post-mortem appearances, would seem to occupy a position midway between various forms of septicæmia and pernicious anæmia. It resembles the former in the raised temperature, in the broncho-pneumonia, the petechiæ and tendency to hæmorrhages, the leucocytosis and the enlarged soft spleen; the latter, in the great diminution in the number of red cells, the clinical characteristics of a profound anæmia and the increased amount of iron in the liver. This increase of iron suggests that in cases where the blood cells are destroyed as the result of infective processes this iron may accumulate in the liver even though the portal area be not that more directly involved. Other interesting features are the rapid diminution in the number of red cells while under observation and the extensive hæmorrhage following a needle puncture of the liver.

Note.—The exploratory puncture was made in the liver, because, although the liver dulness did not exceed normal limits, the lower part of the right chest appeared more prominent than the left, and it was thought possible that the condition of the patient might be due to hepatic abscess, the well-marked leucocytosis being suggestive of some suppurative process.

REVIEWS AND NOTICES OF BOOKS.

MODERN OBSTETRICS: GENERAL AND OPERATIVE. W. A. Newnan Dorland, A.M., M.D., Assistant Demonstrator of Obstetrics, University of Pennsylvania; Associate in Gynecology, Philadelphia Polyclinic. Second edition. Philadelphia and London: W. B. Saunders & Co. (J. Little, Melbourne). 1901. Cloth, 20s.

The object of the author of this work is to give "a systematic and rational presentation of the subject of Obstetrics, as recognised by the leading teachers of the day"; and these words of his own are a very good description of the book. As the philosopher took all knowledge for his province, so has Dr. Dorland taken the widest survey of obstetric literature, with the result of producing the best work we have seen from the American side for a long time.

The arrangement of the subject is clear and on familiar lines. The Anatomy and Physiology of Gestation, Labour, and the Puerperium are treated fully and well. Under the Symptoms and Diagnosis of Pregnancy a lengthy series of facts, with the occasional intrusion of one or two fancies, give witness to the copiousness of the author's sources of information. Here, as throughout the work, the profusion is at times embarrassing. No name seems to be left out that can be by any means associated with a symptom, a method, or even a fad. It will be at once allowed that some of these names are really great, but a few, it seems to us, are in Malvolio's case having had greatness thrust upon them by our too generous author; happy Beccaria, to wit, who is "named" because he thought he had identified a symptom of pregnancy in a pulsating pain in the occiput. As we turn over the pages devoted to signs and symptoms some statements are met with that the practitioner will not at once assent to. The times are advancing, no doubt, but we are inclined to wait for further evidence before assenting to "other rare signs" of pregnancy, such as the foetal coughing and audible sucking of the thumb, *in utero*. It is surely going too far in a serious work like the present to say that the foetal hiccup ("*singultus foetalis*") has "been recognised and diagnosed by the women themselves."

These are, however, small blemishes and soon lost sight of when the very complete character of the treatise is considered. Nothing is omitted, and the rendering of many parts of the subject will be found to be not only eminently novel but of great practical use. A chapter full of useful hints, for instance, is given on the management and hygiene of the pregnant state. The more recent pathology of obstetric conditions has been carefully written up, the present edition (the second) being completely revised. The illustrations are a special feature and will greatly help the student.

The index of subjects is thorough. For the next edition of so comprehensive a work we would suggest the careful preparation and insertion of an index of authorities, because many of the names quoted are not well known to the reader. The work can be confidently recommended as a trustworthy guide to obstetrics and a reliable help in practice.

A.W.M.

MEDICAL JURISPRUDENCE, TOXICOLOGY, AND PUBLIC HEALTH. By John Glaister, M.D., D.P.H. (Cantab.), F.R.S.E., Professor of Forensic Medicine and Public Health, University of Glasgow. Edinburgh: E. & S. Livingstone. 1902.

This book has been written essentially for the use of medical students, and therefore covers most of the

ground appertaining to the relations existing between the profession of medicine and the public in matters civil as well as criminal. As the author points out, it is not intended to be regarded as an exhaustive treatise on either of the subjects. As a manual for the use of students of law it is also of considerable value, as it contains frequent references to important cases as well as references to the various Acts of Parliament relating to forensic medicine and public health. One is at once struck with the logical order in which the various subdivisions of the subject of forensic medicine are dealt with. The principles as well as the practical details of the subject are dealt with in a manner which at once stamps the author as a sound teacher, and reflects the man of large and varied experience. The first two chapters deal with the subjects of legal criminal procedure and medical evidence, and in the latter many useful hints are given. The two chapters on identity are very well written, and a very complete account of the various anthropometric methods is detailed. In discussing the question of blood stains the value of hemolytic serum in blood testing is referred to, but as the subject may be still regarded as *sub judice* no definite importance is attached to it. The portion of the book devoted to toxicology is very complete, and the matter is disposed of in a terse and decisive manner. A short but very useful account of the various food poisons is also given. The last 200 odd pages are relegated to the discussion of public health. The chapters on preventable diseases, disinfection, and the diseases of occupation are particularly good. On the whole the book is all that one could desire in a manual of this kind. The illustrations are numerous and uniformly good, those relating to the question of personal identity being particularly so.

S.J.

LA LÉPROSE PAR LE DR. DOM SAUTON. Paris: C. Naud. 1901.

This elaborate monograph is professedly written as the result of ten years special study of the disease, in the course of which the author visited the principal foci of leprosy in different parts of the world. The title *La Léprose*, analogous to *La Tuberculose*, is chosen in view of the confusion surrounding the term "lèpre," which has been applied to several different skin diseases. A long chapter is devoted to the history of leprosy. The earliest records of this disease are said to exist in Egyptian sculptures of the time of the first Pharaohs. These sculptures show the mutilations of advanced leprosy. The author holds the general belief of a wide diffusion of leprosy in Europe during the middle ages to be unwarranted, the numerous leproseries of that period being filled with patients suffering from non-leprosy skin diseases. The chapter contains many interesting details of the administrative measures against lepers adopted at various epochs. Another long and abundantly illustrated chapter deals with the present-day distribution of leprosy. In discussing etiology the author regards hygienic, climatic, and dietetic influences amongst predisposing causes, heredity as having only a minor action, and contagion as the chief mode of dissemination. The general issue of this part of the work places leprosy in line with modern ideas on tuberculosis. The chapters on pathology and bacteriology are well illustrated and clearly written, and the main issue of them is to demonstrate that the various described forms of leprosy are but different manifestations of the same morbid entity. For clinical purposes Sauton considers leprosy as passing through four stages—incubation, primary, secondary, and tertiary periods. Discarding the usual classification into tubercular, anaesthetic and mixed forms, or their equivalents, the author gives a

general description of the clinical features of leprosy under the title "forme complete," and briefly notices described varieties under the title of "formes incomplete." A chapter is devoted to the consideration of Morvan's disease, aneheim, morphoea, scleroderma, etc., in relation to leprosy. For the author these are not morbid entities, but conditions which sometimes, at least, are met with in leprosy. The whole work constitutes a valuable addition to our knowledge of leprosy.

F.T.

THE FOUR EPOCHS OF WOMAN'S LIFE: A STUDY IN HYGIENE. By Anna M. Galbraith, M.D. W. B. Saunders & Co., Philadelphia and London; James Little, Melbourne.

The work before us has been most disappointing reading. From the title and owing to the fact that the author was dealing with her own sex, we looked forward with "great expectations" for a treat in store, but a careful perusal failed to discover the aim or object the author could have had in view. If meant for members of the medical profession it is useless, as many of its statements are not, in our opinion, correct; if for the general public, it is quite unsuitable, as some of its teaching is diametrically opposed to the moral instincts of many, we hope the majority, of civilised people. Fearing that we might have missed the mark, and that, perchance, its truths were to be found "between the lines," we read it a second time, but even then the verdict had to be given that it was not a book to be recommended.

H.C.T.Y.

CLINICAL LECTURES ON HYDATID DISEASE OF THE LUNGS. By Alfred Austin Lendon, M.D. (Lond.). London: Baillière, Tindall & Cox. Sydney: L. Bruck. 1902.

This is a timely publication. As far as we know no monograph on hydatid disease of the lungs has appeared since the publication of Dr. Davies Thomas' little book in 1884. Owing to the greater prevalence of the disease in Victoria and South Australia, practitioners in those States enjoy unusual opportunities of observing it, and we look to them for guidance in its treatment. Dr. Lendon has made good use of his advantages, and in this book gives us the results of his observations. From a clinical point of view he recognises seven stages of the disease:—1. The unsuspected cyst. 2. The suspected cyst. 3. The ruptured cyst. 4. The stage of quiescence. 5. Expectoration of the cyst membrane. 6. Septic infection of the adventitious sac. 7. The empty cavity from which the cyst has been entirely expelled. He tells us that of these stages "some may be well marked in one case but absent in another; some may be of prolonged duration in one instance and of momentary duration in another. Occasionally several stages may be passed through in the course of a few moments."

The symptoms, physical signs, diagnosis, prognosis, and treatment in each stage are discussed and illustrated by the record of cases. A chapter is devoted to the consideration of the complications of pulmonary hydatids, bronchitis, pneumonia, pleurisy, pneumothorax, phthisis, and gangrene. Another chapter, and not the least important, deals with the treatment of cysts, which, although originating in the abdominal viscera, have encroached upon the thoracic cavity. In these cases the diagnosis is often difficult, and the results of treatment as shown by statistics are much less favourable than those of lung hydatids. The book closes with a chapter on the anatomy, pathology, and etiology of the disease, and another on causation and prevention.

The interest of the work centres, of course, upon the treatment of the affection in its various stages. In the case of the ruptured and suppurating cysts with profuse expectoration, hectic and wasting, there is no room for doubt that the radical operation should be performed without unnecessary delay, and in these cases we have usually no difficulty in inducing the patient to submit to operation. It is in instances of non-ruptured cyst (which, however, rarely fall under our observation) and in those of ruptured cyst which have not yet suppurated that differences of opinion as to the propriety of operative treatment are found. Dr. Lendon thinks that the radical operation should be performed on both the unruptured and the ruptured cyst as soon as recognised, and he supports this view by the following considerations:—(a) The probability of the cyst dying spontaneously is very remote; (b) the probability of its growing to a large size if left untouched, bursting and perhaps smothering the patient; (c) the fact that the dangers of operation are increased in direct ratio to the size of the unruptured cyst; (d) the risk of profuse and even fatal hæmoptysis; (e) the dangers of sepsis. These are sound reasons for recommending the radical operation, but in our experience, unless the patient's general health has suffered very much, he is usually unwilling to submit to it. Treatment by simple tapping or aspiration is only mentioned by the writer to be condemned, and in this all who have had experience in the treatment of hydatid disease of the lung will agree. The book is well got up, is very readable, and will be found valuable by both students and practitioners. It has no index, a fault which Dr. Lendon will, no doubt, correct in a future issue.

P.S.J.

DISEASES OF THE DIGESTIVE ORGANS IN INFANCY AND CHILDHOOD. By Louis Starr, M.D., late Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania, etc. Third edition. Rewritten and enlarged. Philadelphia: P. Blakiston, Son & Co. Sydney: L. Bruck. 1901.

Ten years have elapsed since the last edition of this work was published, and the author has taken the opportunity of a new edition to add some new chapters, and to omit some that were obsolete. Some important additions have been made to the sections dealing with the subjects of simple atrophy, infantile scurvy, rickets, lithæmia, infective follicular tonsillitis, naso-pharyngeal adenoid hypertrophy, proctitis and appendicitis. These alterations have brought the book well up to date. A valuable part of the book is the introduction on the general management of children, which deals with the important subjects of feeding, bathing, clothing, sleep, exercise, and the management of weak and immature infants. The work is illustrated and interspersed with numerous prescriptions suitable for the treatment of the various digestive disorders of children. We can thoroughly recommend this edition of the book.

G.E.R.

CONTRIBUTIONS TO PRACTICAL MEDICINE. By Sir James Sawyer, M.D., F.R.C.P. (Lond.), F.R.S. (Edin.), Senior Consulting Physician, Queen's Hospital, Birmingham, etc. Third edition, revised and enlarged. Birmingham: Cornish Brothers, 1902.

This small volume includes a lecture on Insomnia, recently delivered by the author, as well as lectures on other matters of practical interest. Sir James Sawyer is not a voluminous writer, but his work is always good and sound, and a perusal of these lectures will prove both interesting and instructive.

THE AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, 20TH SEPTEMBER, 1902.

A PROPOSED MEDICAL DEFENCE FUND.

WITH the increasing number of gentlemen entering the medical profession from year to year, the conditions of medical practice have altered somewhat from what they were in by-gone days. It has become necessary for the organised ranks of the profession represented by the State Branches of the British Medical Association and allied societies to take steps to prevent the degradation of the profession in the eyes of the general public, and to defend themselves against the encroachments of societies whose aim is to get as much out of the medical man for as little payment as possible. In these days we have to contend with proprietary lodges and organisations such as the Australian Natives' Association, whose contempt for the simple rights of medical men is not concealed.

It is a matter of regret that, in the prosecution of this policy of maintaining the best interests of the profession at large, it has been necessary to ostracise some medical men, who, from a short-sighted policy of self interest, have decided to ignore the wishes of the majority of their fellow practitioners. We should much prefer that such a course of ostracism had never become necessary, and that the profession had become a thoroughly united body. It is also to be regretted that some medical men who have loyally abided by the decision of the majority of the profession, even though they may have held opposite views, have suffered financially as a result of their loyalty to the profession. It has been recognised that while these medical men have made considerable financial sacrifices to meet the

wishes of their fellow practitioners, and to maintain their rights, nothing has been done practically by the profession as a whole to compensate these men for their loss. To this it may be replied that nothing can be done in this direction. But if we are to continue a policy of ostracism of objectionable societies and their medical officers, it must be seriously considered whether we can in future ask medical men to resign from these organisations without offering them something in return. The apparent injustice of such a demand was, we believe, keenly felt by some medical men who, at the request of the New South Wales Branch of the British Medical Association, recently resigned their appointments as medical officers to a medical institute in Sydney.

At a special meeting of this Branch, held last month, a resolution was passed on the motion of Dr. FURNIVAL appointing a committee to elaborate a scheme for the establishment of a medical defence fund to be submitted to a subsequent meeting for further discussion. It is, of course, realised that it would be practically impossible to raise a fund sufficient to fully recoup a medical man who might resign from a medical benefit society at the instigation of the Branch, but it is thought that if a fund of this kind were in existence some temporary assistance might be given to him on resigning any objectionable appointment. It has been suggested that a fund for this purpose might be raised by annual subscription and donations from medical men whether engaged in lodge practice or not. Multiplication of medical societies with their necessary annual subscriptions is not desirable, and we think that if the establishment of a Lodge Practitioners' Defence Fund is not considered practicable, possibly some modification of the constitution of the New South Wales Medical Union might be secured to meet this object. In the meantime we hope medical men will carefully consider the proposal, so that when the matter comes up for discussion we may have the results of matured thought upon it.

THE ADULTERATION OF MILK.

WITH the approach of summer weather, and the accompanying large amount of gastric and intestinal disorders in children, it is a matter of great importance that the milk, which forms so large a part of the dietary of infants and young children, should be quite pure. From the annual report of the Medical Officer of Health for the Sydney metropolitan combined districts, we learn with regret that there is an immense amount of adulteration practised on the milk supplied to Sydney, not only by the addition of water often in large quantities, but by the addition of chemical preservatives, both in summer and winter. This statement is supported by the fact that out of 212 samples of milk taken and submitted to analysis, no less than 134, or 63 per cent., were found to be adulterated. Quite recently some milk purveyors in the Glebe district of Sydney were fined for having sold milk which was found to contain added water to the extent of over 3 per cent. and boracic acid to the extent in one case of $5\frac{1}{4}$ grains per gallon. In another case at the same court the report of the Government Analyst showed the presence of added water to the extent of 3 per cent., the fat being only 2.9 per cent. and the other solids only 8.2 per cent. This analysis was disputed by another analyst, who stated that the milk in question was a pure milk, but of poor quality, and contained 3.53 per cent. of fat. There is no standard for milk in New South Wales, but the Association of Public Analysts in England have adopted a standard which is universally recognised, and it is not apparent how such a variation in the results of the two analysts, who professed to adopt the same standard, is to be explained.

In a paper on the "Importance of Milk Analysis in Infant Feeding," in a recent issue of the *Boston Medical and Surgical Journal*, Dr. WENTWORTH reports the analysis of several samples of milk obtained from the milk vendors

in Boston. The examinations were made in the Pharmacological Laboratory of the Harvard Medical School, and the Chemical Laboratory of the Massachusetts General Hospital. The estimation of the percentage of fat was made by the Babcock method; the percentage of sugar by polariscopy; and that of the total solids, proteid and mineral matter, by incineration. These gave the following results:—Fat varied from 8 to 15.20 per cent.; sugar and proteids from 8.30 to 9.64 per cent.; and the ash from 0.47 to 0.65 per cent. These figures serve to show only what might be expected, that the nutritional quality of milk must vary within considerably wide limits consistent with purity. But there can be no excuse for the addition of chemical preservatives which have been proved to be detrimental to health, and the Departmental Committee of the English Local Government Board, appointed in 1899 to enquire into the use of preservatives and colouring matters in foods, have recommended, in their report, that the use of any preservative or colouring matter whatever in milk offered for sale should be constituted an offence under the Sale of Food and Drugs Act. As Dr. ARMSTRONG remarks, "this decision is a most valuable one, as it will strengthen the hands of sanitary authorities throughout the English-speaking world in suppressing the adulteration of milk, which was certainly assuming, in this country at all events, alarming proportions."

The machinery of the New South Wales Public Health Act, in respect to the prevention of adulteration of food, works well, and every assistance in the way of analysis of all foods is undertaken by the Department of Public Health free of charge. We hope that the efforts of this department to secure a pure milk supply will be vigorously supported by the profession at large, and that in the next annual report by Dr. ARMSTRONG we shall read of a great advance having been made towards this very necessary object.

THE MONTH.

Medical Men and the Lay Press.

It will be seen from a report in another column of the special meeting of the New South Wales Branch of the British Medical Association held last month that the motion proposed by Dr. Fiaschi for the appointment of a special committee to draw up some resolution on the relations between medical men and the lay press was negatived. Two amendments to the motion were also negatived, so that the question still remains undecided. It is a pity that some finality on this question was not reached, but it would appear that in the present state of feeling amongst the members of the Branch this is not to be attained just yet.

Meeting of the N.S.W. Branch of the British Medical Association at Newcastle.

It has been remarked that medical men residing in the country profit but little by membership of the Branch of the British Medical Association, beyond getting the *British Medical Journal* and the *Australasian Medical Gazette*. It has, accordingly, been suggested that country members might be brought more directly into touch with the Association if some meetings were held in the country towns. From the report of the meeting of the Council of the Branch, published in our last issue, it will be seen that it has been decided to hold a meeting of the Branch in Newcastle during the month of October next, the exact date to be announced later. We hope that as many members as possible, living within easy access of Newcastle, will attend this meeting; and we would remind our friends that medical men who may not be members of the Branch may be introduced to the meeting by any member.

The Conduct of Medical Meetings.

At the recent very successful meeting of the American Surgical Association it was decided that only eight minutes should be allowed for the reading of each paper, and as a result 30 papers were presented, and considerably more than 100 discussions were possible. Eight minutes would seem a very short time to allow to an author to present even the barest results of any medical research. But, as the *Boston Medical and Surgical Journal* points out, "it is unquestionably possible to condense into this time the salient features either of a clinical or a scientific report, leaving out all the extraneous

and usually unessential details which are so apt to creep into the ordinary medical contribution." Very lengthy communications only weary the audience, the salient points are often overlooked, and really profitable discussions cannot take place upon them unless summaries of the papers be printed and placed in the hands of the audience. The executive committee of the next Australian Congress may seriously consider the arrangements for the conduct of the business of the sections, and we would suggest that instead of there being a number of papers on diverse subjects some attempt should be made to select definite subjects for each day's sectional work, a time limit being placed on each reader of a paper or speaker at a discussion.

The Treatment of Neglected Children.

We are glad to know that the Attorney-General of New South Wales has prepared a bill for presentation to the State Parliament dealing with the treatment of neglected children. It is proposed to establish day industrial schools to which children found wandering about the streets might be sent by a magistrate. The child would be taught there in the ordinary course, and would be fed at a nominal cost to the parents. If the child could not be managed by its parents it could be left at the school entirely. There is no intention to interfere with existing arrangements for dealing with neglected children such as the N.S.S. "Sobraon" and the Reformatory, but they would probably be graded as industrial schools. Captain Neitenstein, the Comptroller-General of Prisons, has for several years past advocated a measure of this kind in his annual reports, and he states that the way in which children are allowed to wander about the streets can only be regarded as a great evil, since it has been proved beyond all doubt that truancy is the most prolific cause of juvenile crime, and if the growth of the criminal population is to be checked the children must be kept out of the streets.

Fees to Medical Witnesses.

In reply to a question by Mr. J. C. L. Fitzpatrick as to fees and travelling expenses to medical men, Sir John See said that fees paid to medical witnesses compelled to attend the coroner's courts are prescribed by Act of Parliament, but by Executive regulation power is given to the chief medical officer of the Government to pay in addition to a special mileage rate, on recommendation of the coroner, when the distance travelled to the scene of inquest has exceeded 20 miles. The inequality

of this regulation, as compared with the mileage rate allowed to Government medical officers whose services are requisitioned by the police, has been recognised, and a fresh regulation, under which the special allowance may be paid when the distance travelled has exceeded three miles, has been made the subject of a recommendation by the chief medical officer of the Government.

Australian Child Study Association.

At a meeting of this association, held in Sydney on August 26th, a lecture was delivered by Dr. W. F. Quaife on "The Mind of the Child." He compared the plans of teaching adopted in the State schools here and in America, and said that an intellectual want of interest was visible in young Australians, and was due to the faulty methods adopted in their schools. The true school was not a workshop for the teachers, but an expression of the child's own life, and it was by studying the child that the master learnt how to teach him. On the following day, upon the invitation of Lady See, a meeting was held at Randwick for the purpose of hearing addresses from Drs. Flashman and Brennand, and representatives of the Child Study Association, with the view to the formation of a branch at Randwick. Miss McClelland (general hon. secretary) explained that the Child Study Association had been formed about four years ago, and was endeavouring to awaken a wider interest in the study of the young. To discover the peculiarities of children it was necessary to establish a laboratory, in which all could be scientifically investigated and physically and psychologically tested, so that they might be classed and graded according to their physical and mental capabilities, and trained into habits which would produce a lasting benefit to themselves, and a future good to their country.

Drs. Flashman and Brennand delivered two addresses upon the subject, both from a scientific and practical point of view. The subject of child study could be approached from many different directions, according to the view of the student, whether he be a parent, teacher or anthropologist, a psychologist, a physician, or simply a lover of young humanity in the abstract. In England and in most of the Continental countries and America there were strong associations established for the sole purpose of studying child life in all its aspects. Such was, to a very great extent, due to the impetus given to such inquiries by the works of "Froebel" and others on the Continent, and the development of the kindergarten system in consequence. Child study was producing an enormous literature of its own.

OBITUARY.

Death of Professor Virchow.

A CABLEGRAM has been received announcing the death of the veteran pathologist, Professor Rudolph Virchow, in his 82nd year. In our London correspondent's letter, published in April last, there is an account of the accident which befell the distinguished scientist. As he was alighting from an electric car he fell on the asphalt roadway and fractured his femur. He was the recipient of an immense amount of sympathy from all classes in Germany, as well as from scientific workers all over the world. The *Berliner Klinische Wochenschrift* at that time announced that the fracture was beginning to mend, and that his general health was good, except for some want of refreshing sleep at night. In our last issue our London correspondent, referring to the accident, stated that the Professor's recovery was all that could be desired, and that he had left Berlin for the country for some months. His assistants were to carry on his work at the University during the summer term. He had resigned the presidency of the Berlin Medical Society. This is the latest news we have, and we must await the arrival of the English mail for full details of the cause of death.

Rudolph Virchow was born in Pomerania in 1821. At the age of 22 years he graduated doctor of medicine at Berlin, and four years later he became a member of the teaching staff. A year later he was appointed a member of the Government Commission to inquire into an outbreak of typhus fever among the weavers in Silesia. He was subsequently appointed professor of pathological anatomy at Wurzburg, and while there he published his work on "Cellular Pathology." He was then recalled to Berlin University, from which he had been expelled for political reasons.

Entering the Chamber of Deputies in 1860, he rapidly rose to the leadership of the Liberal Opposition, and as such made a firm stand against the encroachments of the reactionaries under the guise of the royal prerogative. In 1878 Virchow retired from political life. During the last illness of the Emperor Frederick he was constantly consulted. At the International Congress on Tuberculosis he attended in his capacity as director of the Pathological Institute of Berlin, a position he had held for 45 years, and was prominent in antagonism to the theory of Professor Koch that consumption is not transmissible by tuberculosis germs from cattle in food to human beings. In October last, when Professor Virchow celebrated his 80th birthday, the Emperor William of Germany presented him with the gold medal awarded periodically for eminent research in science.

The following extract is from an editorial article from the pen of Professor Wilson in our issue of July, 1901, on the celebration of Virchow's 80th birthday:—

"It is probably not too much to say that the period of Virchow's active scientific career has been the most fruitful epoch in the history of the medical sciences. Of the illustrious band of European observers and investigators who made the middle period of the nineteenth century what it was, Rudolph Virchow is now one of the very few, and also one of the most distinguished, surviving representatives. In a very real sense, every one who follows up the science and practice of rational medicine may be said to be the pupil of one who, if not the sole founder, was the most celebrated exponent of that 'cellular pathology' upon which is based practically all our interpretations of morbid structure and process."

BRITISH MEDICAL ASSOCIATION NEWS.

PROCEEDINGS OF AUSTRALASIAN BRANCHES.

New South Wales.

A SPECIAL general meeting of the Branch was held at the Royal Society's Rooms on Thursday, August 14th, 1902, Dr. G. E. Ronnie (president) in the chair. There were 43 members present.

The HON. SECRETARY read the circular convening the meeting.

The PRESIDENT announced the election of the following members:—Dr. G. P. M. Woodward, Sydney; Dr. H. S. Capper, Potts Point.

Dr. FURNIVAL moved the following resolution—"That the establishment of a defence fund is desirable for the protection of members who may suffer financially through resigning medical contract appointments at the instigation of the Branch, and that a committee be appointed to draw up a scheme for consideration at a future meeting," and said he had felt for some time past that the action of the British Medical Association with regard to the Australian Natives' Association and proprietary lodges had been to a certain extent hampered by not having such a fund as this, which could be utilised in assisting medical men who were compelled to give up some of their lodge appointments. If there was a fund which could assist a man to keep going, at any rate for a time, it would be invaluable. It should be remembered that some men with families depending upon them would think twice before sacrificing themselves. As far as his position was concerned in the lodges he had given up, he was not very materially concerned, but there were others who would be seriously embarrassed if called upon to give up some of their appointments. It would not cost much to start a fund to provide at least a portion of the income forfeited. All the medical societies should be represented upon the committee. There were about 700 medical men practising in New South Wales, and half of them were engaged in lodge practice. He thought the subscription should be £2 2s for members having lodge practice, and £1 1s per annum for those not in lodge work. No man could come upon the fund unless he had been called out by the Branch. He thought this matter should be dealt with seriously and earnestly, as it meant either success or failure in the matter of fighting for the rights of the profession, and would give the medical men such a weapon as would be of the very greatest benefit. He hoped that the scheme foreshadowed would be elaborated by the committee he desired to have appointed.

Dr. ANGEL MONEY seconded the resolution, and said he thought the scheme deserved earnest consideration, and he hoped that such a fund would be started.

Dr. MACPHERSON said he desired to support the resolution. He understood that Dr. Furnival resigned the lodge because the other medical officer was connected with the Australian Natives' Association. He thought Dr. Furnival was to be commended for his action; there were, however, other members who were not prepared to do the same.

Dr. McDONAGH said that before taking action they should be sure of their ground. Temporary help could only be given in certain cases. In his opinion lodges ought to be a thing of the past. A fund might be started on insurance lines. He was heartily in accord

with the spirit of the resolution, but was of opinion that it was impossible to give adequate compensation.

Dr. BRADY said he thought such a fund should be started, and was sure that donations would be given by those interested. He was prepared to donate a sum as well as give an annual subscription.

Dr. BOWMAN said this resolution was of importance, especially to the younger men of the profession. He felt sure that the older men would give donations as well as annual subscriptions. Dr. Furnival's action was a noble one. He had given up several lodges on the principle that the profession should not have anything to do with the A.N.A. or its medical officers. The starting of this fund would be a distinct advantage to the branch in the fight. He felt sure that all lodge doctors would become subscribers to the fund.

Dr. MCKAY said if the Association was to be a power it must have money. He thought this matter was one of insurance. The scheme deserved every consideration, and could be made very successful.

Dr. BINNEY said he would like to ask Dr. Gill if the functions of the Medical Union embraced this question.

Dr. GILL said the funds of the Medical Union could not be made available for the purpose mentioned in the resolution. The income of the Medical Union was about £300 per annum, and the expenses so far only about £50 or £60. The accumulated funds amounted to something over £2000. The scope of the Medical Union was so different to the present proposal that it was not possible to include the two in one society.

The resolution was agreed to unanimously.

Dr. FURNIVAL proposed that the following constitute a committee to discuss the matter:—The President and Hon. Secretary of the New South Wales Branch British Medical Association, President of the Medical Union, President of the Sydney and Suburban Provident Association, Presidents of the Metropolitan, Eastern Suburbs, Western Suburbs, Northern Suburbs and Newcastle Medical Societies, and the mover, with power to add to their number.

After discussion this was agreed to.

Dr. COLLINS moved the following resolution:—"That it is desirable that a scale of fees for medical examinations for life assurance be determined on, and that the Council be requested to formulate a scheme for consideration at a future meeting," and said his reason for bringing this matter forward was that he found a great division of opinion as to the fees paid for examinations in life insurance. He had recently been asked to act as medical referee to a company, but had declined the honour, as he did not consider the fees adequate. The scale was for policies up to £100, 10s 6d each report; from £100 to £1000, 21s; and for over £1000, £2 2s each. The report in each case was a lengthy one, numbering about 60 questions. He thought if the fees were cut down the report should also be reduced. He (Dr. Collins) thought in the case of the smaller amounts a certificate should be considered sufficient. He hoped the Council would formulate some uniform scale of fees.

Dr. MACPHERSON seconded the resolution, and said when he was in practice at Glen Innes he had an experience of proposed cutting down of fees. The Independent Order of Foresters made overtures to him to take business at 10s 6d fees, but he refused, and the other medical man doing the same the company got no business either in Glen Innes or Inverell; however, when he came to Sydney he found that the 10s 6d fee was the fee offered by several societies.

Dr. McDONAGH said, being chief medical officer of a society, he knew the difficulties in the way of laying down a uniform scale of fees. In many cases a proponent was examined, but did not complete the business in the prescribed fortnight; that necessitated another examination.

He did not think that such second examination should be charged for at full rates. The guinea fee had been the precedent, and should be adhered to as far as possible. He did not believe in a sliding scale.

Dr. HANKINS said, inasmuch as this resolution provided for the Council formulating a scheme, he would like to say what had been done so far. The Council were of opinion that if the industrial societies were content with a simple certificate, without filling up the usual report form, a fee of 10s 6d might be accepted, but for all full reports one guinea should be charged. It must be remembered that the industrial business was growing, and it was manifestly unfair to ask medical men to fill up these lengthy forms for 10s 6d.

Dr. MCKAY said this was simply a question as to management. The societies were managed by business men who knew their business, and would not be likely to pay for an inferior article; it was therefore necessary for the profession to stand firm, and have a uniform fee of one guinea for all examinations.

Dr. ARTHUR said if a one-guinea fee were demanded, perhaps the societies would simply engage and pay two or three men to do the work.

Dr. SHELTON said the conditions suggested by Dr. Arthur already obtained in some of the societies.

The resolution was then put to the meeting and carried.

Dr. FIASCHI moved—"That a special committee be appointed to define the ethical relations between the medical profession and the press; such committee to consist of Drs. Manning, Quaife, Scot Skirving, Clubbe, Morgan Martin, Worrall and Fiaschi; also that their report be forwarded to every member of the branch, and brought for discussion at a special general meeting in October next," and said his reason for bringing forward this matter again was the fact that the laws with regard to the press were not written. He thought the committee would be able to lay down certain rules for the guidance of the profession.

Dr. ANGEL MONEY said he had not an opportunity at the last meeting of speaking on this subject. He should like the committee to deal with all questions of ethics, not only their relationship to the lay press, which, after all, was only a minor point. Some of their most distinguished members have been guilty of unethical conduct. Some have an advantage by the positions they occupy. One man may steal the horse, while another may not look over the fence. He desired to see this matter set at rest, and he thought the only way would be to lay down certain rules for their guidance, so that they might know what may be done and what may not be done. He had seen paragraphs and advertisements appearing time after time, and no action taken, whereas other men were brought up on the least pretext.

The PRESIDENT explained that a resolution bearing on the question of advertisements in the lay press had been passed several years ago at a meeting of the Branch.

Dr. WILKINSON said he thought there were a great many more matters of ethics which ought to be dealt with as well as the relations of the profession with the lay press. In his opinion, if articles were to appear in the press, then the name must appear to make them of any value. It would, of course, be outrageous if a man were to discuss another man's case in the press; but where matters of public health were concerned, who was better able to discuss them than the profession? If we desire the public to take an intelligent view of consumption, how were we to educate them except through the press, or by lectures? The composition of the committee did not commend itself to him. He did not believe in the committee; a report would be brought up, and then the whole question must still be left very much to a man's honour. He thought there should be a court

of ethics established, to consist of five members. To this court all questions of ethics should be referred. He would, therefore, move as an amendment—"That the New South Wales Branch should establish a court of ethics, consisting of five members, to which all matters appertaining to medical ethics shall be referred for consideration and report. That a sub-committee be formed for the purpose of carrying out this resolution."

Dr. MCKAY seconded the amendment, and thought the suggestion a very good move. There would be five men who would not take any cognizance of personal matters, but would deal with the case on its merits.

Dr. BRADY said it would be difficult to arrange the machinery for such a court. Many details would have to be dealt with, such as the duration of the appointment to the court and how often they should be elected. He did not think the proposal workable.

Dr. McDONAGH supported the amendment. He thought Dr. Wilkinson's idea a happy one. We would have men to adjudicate upon cases who would be above suspicion. He did not see any difficulty in arranging for the working of the court. We were a company, and could appoint a sub-committee to deal with all matters relating to ethics.

Dr. BINNEY said it was not only the relations of the Sydney medical men with the press, but also of those living in the country which had to be considered. The Council was elected by the whole body of the profession, and therefore had the confidence of all the members. The committee, such as suggested to-night, would only represent a very small proportion of the members. He (Dr. Binney) thought the Council would be the proper body to deal with the question, therefore he would move a further amendment—"That the Council be asked to define the ethical relations between the medical profession and the press; also that their report be forwarded to a special general meeting in October next."

Dr. LUKER seconded Dr. Binney's amendment, and said they could not expect all the members to abide by the decision of a small meeting of members. He thought it should be left to the Council.

Dr. BRADY, in supporting the amendment of Dr. Binney, said the Council was the Parliament of the profession; a committee appointed by a small meeting could not carry the same weight.

Dr. FIASCHI, in reply, said there could not be any doubt that the principles should be written down. If the rules were passed they could be made very broad, and would not include trifles. As to the objections of having a special committee, he had suggested that the special committee should act so as to relieve the Council of any extra work. As far as he knew, the committee was representative of the profession.

The PRESIDENT then put the amendments and resolution to the meeting, and they were all negatived.

The regular monthly meeting of the Branch was held at the Royal Society's Room on Friday, August 29th, 1902; Dr. G. E. Rennie (president) in the chair: There were 54 members present. Visitor: Dr. Metcalfe, Norfolk Island.

The minutes of the previous general and special general meetings were read and confirmed.

The PRESIDENT announced the nomination of Dr. McDouall, of Callan Park.

Dr. WILKINSON gave notice of a question as to advertising in the *Australasian Medical Gazette*.

Dr. HERSCHELL HARRIS exhibited—(1) A case of hypertrophied scar of neck treated by X-rays; (2) a case of depressed nose treated by paraffin injection.

Dr. GOODE congratulated Dr. Harris on the successful result of his application of the X-rays in the case he had exhibited that evening. It was interesting and highly gratifying to note how the hard granulations had disappeared under the treatment, and also to note the increase of the small blood vessels in the surrounding tissue.

Dr. ANGEL MONEY also congratulated Dr. Harris on the case shown. He, however, considered that it would be necessary to have many more cases as evidence of the successful treatment by such means before they could pronounce decidedly in favour of the use of the X-rays in the removal of such scars. A history of these scars tends to show that they sometimes disappear of themselves in some unexplained way.

Dr. BINNEY referred to a case in which the expected improvement in the shape of a depressed nose through the injection of paraffin wax had not followed the treatment, and he suggested that the operator should protect himself against legal proceedings should the operation not result in an improvement in the deformity.

Dr. RENNIE read a paper on "Meralgia Parasthetica." (See page 446.)

Dr. WILKINSON thought there was some difficulty in explaining the condition. In Bernhardt's cases it had frequently been a sequel to typhoid fever. He had known a case to continue for years, the chief symptom being loss of sensation, resisting all treatment in the most persistent way. Iodide of potassium had only very partially relieved the symptom. The condition had extended to the perineum, and even to the testicles. The attack had followed typhoid fever. He thought at first that it was due to a bone infection, an osteomyelitis, such as frequently follows typhoid fever, but he thought subsequently that it was a purely nerve condition.

Dr. RUSSELL NOLAN stated he himself, when in South Africa, had experienced a similar sensation of numbness, and had attributed it to having inadvertently compressed some nerve, but after awhile he had felt no more of it. Listening to the description given by Dr. Rennie had enabled him to recognise an old friend in the disease.

Dr. ANGEL MONEY was not sure that the *sui generis* of the disease had been quite made out. The anaesthesia was a very marked symptom in it. But there was frequently also present a burning sensation like that present in paralysis agitans. The disturbance was frequently so marked that patients not aware of the true cause were apt to regard it as a forewarning of some serious nerve disorder. He was sure that they all felt indebted to Dr. Rennie for having brought the disease so prominently before them.

Drs. RENNIE and CRAGO read notes on a case of Cerebral Hydatid, and also further notes on a case reported previously. (To appear in a future issue.)

Dr. BRADY remarked that it was a good plan the putting back of the pieces of bone, and he would like to ask Dr. Crago why he had not on the second occasion done as he had in the first in this respect. In an operation for general meningitis the speaker had followed the plan, and on subsequent examination it had been scarcely possible to point out where the piece had been taken out.

Dr. HINDER read a paper on "Complete Prostatectomy and the Bottini System." Specimens were exhibited. (See page 439.)

Dr. MAITLAND said the thanks of the meeting were due to Dr. Hinder for again bringing before their notice the interesting question of the operative treatment of enlarged prostate, and he was to be congratulated on the results of his cases of enucleation. He (Dr. Maitland) had done the operation by both routes—suprapubically and through the perineum—and he preferred the perineal route in suitable cases; that is, in

large adenoma of the prostate it was best to do a suprapubic cystotomy first, then enucleate through the perineum. This operation had these advantages: that (1st) there is less bleeding, as the prostatic plexus is somewhat deficient on the under aspect of the prostate; (2nd) the wound is kept clean, the bladder and urethra not being opened below. The advantages of the preliminary suprapubic were: (1st) the bladder is drained; (2nd) a thorough exploration is made, so that there is no possibility of missing a vesical calculus in a post-prostatic pouch, as happened in the case Dr. Hinder mentioned; and (3rd) pressure downwards with the fingers of the left hand introduced through the suprapubic wound greatly facilitated the perineal enucleation. With regard to Bottini's operation, he had never done it, and he never would. The technique of the operation itself he would not attempt to criticise; but a surgeon should be able to judge whether an operation is opposed to surgical principles or not. If this were not so, it would be necessary for them to make the same mistakes as their ancestors before being able to avoid them. This operation is unpopular in England. Maunsell Moullin, in his work that Dr. Hinder has referred to, admits to having done the operation once, and the only man in this country who did the operation was the late Dr. Lillie. Dr. Maitland was familiar with the Bottini incisor, and considered that there are grave surgical drawbacks to its use. First, the operation is done in the dark. Information as to the vesical contour of the prostate can be obtained in some cases by the cystoscope, but this instrument is not of the value in these cases it was thought it would be, (1st) because of the difficulty of introduction, and (2nd) if it were introduced the light was often shut off by the prostatic outgrowth. This was pointed out by Dr. Hinder himself in a previous paper; but even if the prostatic contour were seen, the floor of the prostatic urethra could not, and it was here the incision was made. Frendenberg's improvement on the instrument that Dr. Hinder used was no better in this respect. A further drawback to the operation was insufficient drainage. Dr. Hinder said that he did not drain in these cases. The urethra is ineffectual as a drain for the bladder. There must be considerable destruction of tissue in Bottini's operation, and to leave this in a closed sac was opposed to surgical principles; it was opposed to all bladder surgery, and was a piece of surgical neglect for which there was no excuse. A further objection to the operation was the danger of hemorrhage, and the fact that it did not come on at the time of the operation, but later when it was unexpected, when the sloughs began to separate, made the danger all the greater. Another objection to the operation was the possibility of contraction. They were all aware of the liability to contraction after a burn, and contraction must nullify the efficacy of the operation. A further objection to the instrument was that you did not know how long to make your incision. There is an indicator to tell you how long you have made the incision, but how are you to know how long you ought to make it? You cannot see the area of operation, and you cannot feel it. Dr. Hinder himself had pointed out that examination per rectum does not give you a correct idea of the size of the prostate, as the growth is mainly intravesical. There were other objections, viz., the danger of perforating the rectum, suppression, absolute retention, perforation of the urethra. These complications had all happened to those who use this instrument—Willy Meyer or Frendenberg. He felt strongly that if this canter was to be used on the prostate that the area of operation should be under the direct eye of the operator; and, further, that opportunity should be given for a thorough digital examination of the bladder and prostate.

Dr. GORDON CRAIG said the report of the cases by Dr. Hinder carried conviction. He could not agree with the objections against the method raised by Dr. Maitland. Secondary hæmorrhage was, however, a serious condition to be encountered. He had had such a case of furious bleeding, and this only ceased after a black slough had come away. The advantage of treating cases in the early stages was obvious.

Dr. HINDER, in reply, said that Dr. Craig's remarks were to the point, and hit the nail on the head. He was thankful to Dr. Maitland for his criticism, but hoped he will not take it ill if he disagreed with him on a great many points. He stated that Bottini's, or rather Frendenberg's, modification of that instrument was falling into disfavour, and that it was not used at all in Great Britain. On the other hand he (Dr. Hinder) maintained that the instrument had been very much revived the last few years, and the fact that considerable ingenuity had been exercised in modifying it in the minor details was proof positive that the instrument was being appreciated. Recent journalistic literature, both American and Continental, had dealt with the instrument and its results at considerable length. Schlangintweit had devoted an article of considerable length to one detail only in connection with the use of the instrument. It was an instrument which if used as it should be used, and, as was indicated in his paper, in properly selected cases, was certain to be attended with very gratifying results. He was sorry to say that the cystoscopic prostatic incisor, the instrument which meets with Dr. Maitland's approval, is one which may be theoretically a good one, but practically is of no service because as soon as an incision is made there is slight bleeding and the cystoscopic part is valueless. The argument that the cut is made in the presence of foul urine was specious, but not good. The body was accustomed to these toxins, and the additional dose, as a matter of fact, did no harm, or what a great amount of harm would arise after suprapubic removal of the prostate. However, the proof of the pudding lay in the eating of it, and in only two or three of his cases did he drain through the urethra, and only one had a rise of temperature to 101 and he was suffering from pyelitis. The series of 20 cases published by Willy Meyer, which Dr. Maitland quotes have since amounted up to 50. It must be remembered, however, that he did not select them, but purposely set out to give the operation a full trial by using this method for every case he came across. The speaker's contention was most emphatically that the instrument should only be used for selected cases such as he mentioned. He had so far selected them, and the results have been everything that could be desired. He was sorry to say that time would not permit him to reply further, but it must be remembered that no single operation was a cure-all for every case of prostatic hypertrophy; each case demanded consideration and must be dealt with after the method which was best suited to it.

Dr. WORRELL exhibited—1. Hydatid of rectum. 2. Lipoma of Fallopian tube.

1. Hydatid cyst of anterior rectal wall the size of a hen's egg, containing two living and one dead daughter cysts.

The patient was aged 39. The operation was undertaken for retroversion with fixation of the uterus, which bimanual examination, prior to operation, made out to be due to "a prolapsed, adherent peculiarly hard and irregular left appendage." Operation showed this mass to be the left appendage adherent to the hydatid, which simulated in appearance and was at the time thought by me to be a malignant growth. In extirpating it the lumen of the bowel was opened up for two and a half

inches. The opening was afterwards carefully closed with interrupted silk sutures. The patient recovered easily. Apparently this hydatid was single. No evidence of hydatid disease elsewhere could be discovered.

2. A bilateral, pedunculated lipoma, the size of a large hazel nut, growing from the anterior and outer aspect of each Fallopian tube. The patient at 30 was stout, but not obese. Married 10 years; never pregnant. The operation was undertaken for retroversion with fixation of uterus and appendages. The left ovary being the seat of a cyst the size of a large walnut, was removed with its tube and the lipoma. The right appendage was separated from adhesions which bound it to the peritoneum of Douglass' pouch, and only the lipoma removed. As far as I have been able to discover, there is only one other recorded case of lipoma of the Fallopian tube.

COUNCIL MEETING.

The Council met at the Association Rooms on Friday evening, September 5th, 1902. Present: Drs. Rennie, Crago, Jamieson, Hankins, Worrall, Hinder, Foreman, Fiaschi, and Dick.

The minutes of the previous meeting were read and confirmed.

Dr. H. C. McDouall was elected a member of the Branch.

A letter was read from the Inspector-General of Police, stating that Mr. Toose, optician, had removed the word "doctor" from his signboard as requested.

Letter was read from the Balmain Dispensary with reference to the A.N.A.

Letter was read from a member calling attention to gratuitous ambulance instruction being given at the Newington College by the Civil Ambulance lecturers.

Resolved that the chief brigade medical officer be asked to bring the matter before the medical committee.

Letter was read from Dr. Hugh Kirkland with reference to paragraphs appearing in the general newspapers.

Letter was read from Dr. Parry, of Picton, with regard to an objectionable circular sent out by a neighbouring practitioner, also hon. secretary's letter in reply.

Questions asked by Dr. Wilkinson.

Letter from the hon. secretary to Dr. Wilkinson and his reply were read.

Answers to the questions were then discussed and agreed to.

Fees for Life Assurance.—Resolved that it be a recommendation to the general meeting that for certificates of health merely 10s 6d, and for filling up the ordinary detailed schedule £1 1s, should be the minimum fee.

Dr. HINDER brought up the question of the Western Suburbs Medical Association and the local lodges.

Dr. JAMIESON read a letter from Dr. Booth, of Broken Hill, with reference to the reorganisation of the British Medical Association.

The HON. TREASURER reported the following credit balances:—General account, £208 14s; *Gazette* account, £75 14s 9d.

Accounts amounting to £21 6s 11d were passed for payment.

Resolved that the canvasser for advertisements for the *Gazette* be sent to Melbourne, and that his fare be paid.

The HON. TREASURER asked for permission to recover certain outstanding subscriptions.—Authority given.

Resolved that the balance of the conversazione fund be donated to the library.

South Australia.

THE monthly meeting was held at the University at 8 p.m. on Thursday, August 28th, 1902. Present: Drs. A. A. Hamilton (president) and 27 members.

Minutes of last meeting were taken as read.

THE PRESIDENT reported the result of the recent deputation to Hon. J. L. Parsons.

Exhibits: Drs. GILES and SYMONS showed some cases.

Dr. MARTEN and Dr. H. SIMPSON NEWLAND showed—

1. Renal calculi in the kidneys of a sheep.
2. Two fibro-adenomata (one of unusual size) from the same breast.
3. Two rodent ulcers removed from the right and left cheek of the same patient.
4. A right-sided pyo-salpinx existing with a cystic ovary of the same side.

Dr. LENDON showed specimens illustrating stricture of the appendix:—

1. An appendix removed from a girl of eight years who had recently had two attacks in three months. The appendix was somewhat difficult to find, as the cæcum could not be brought outside the abdomen, but it was ultimately recognised as lying in the retro-cæcal fossa: a loop of silk was passed through its mesentery at the base, and the apex gradually separated from its adhesions, leaving, however, the extreme tip behind. On opening it there was found a stricture in process of formation.

2. An appendix removed from a single woman of 28 years during an interval of quiescence, after the third attack in 15 months. The tip was adherent both to the abdominal wall and to the outer side of the cæcum. On laying it open there was found a stricture which would just admit the passage of a bristle about three-quarters of an inch from its extremity.

3. An appendix removed from a married woman of 36 years of age, upon whom oophorectomy had been performed some eight years previously. It shows an impermeable stricture, and a bulbous apex containing in its cavity minute concretions. (Exhibited on behalf of Dr. J. A. G. Hamilton.)

4. Also the front of the chest of a child who succumbed to perforation of a typhoid ulcer, showing congenital, or absence of portions of the ribs.

Dr. JOSEPH C. VERCO showed a left kidney with a large solid growth attached, removed by operation from a young woman, the details of which will appear in a future issue.

The discussion on Dr. J. C. Verco's paper on "Appendicitis" at the last meeting was opened by Dr. J. A. G. HAMILTON, who said: "I had not an opportunity of reading Dr. Verco's paper before making these few notes, as the August number of the *Australasian Medical Journal* had not come to hand; but as the title of the paper was 'Appendicitis or Perityphlitis' it leads one into temptation to wander a little beyond the subject of the two cases cited. First of all, I think it is a pity that this condition should be called by a double-barrelled name, as almost all inflammatory conditions around the caput coli originate in the appendix; so I think 'Appendicitis' a better title than 'Perityphlitis.' The case cited by Dr. Verco, in which the appendicular abscess pointed under the liver, contained a useful object lesson. If this organ confined its vagaries to its own particular fossa it would be much easier to deal with; but abscesses connected with it point under the liver, in the pleura, in the pelvis, in the loin, down the thigh, and even when the appendix is somewhere near its

natural position we expect to find pain in connection with inflammatory conditions of that organ referred to the right iliac fossa, but as a matter of fact the pain is often referred to the other side or other regions of the abdomen. This is particularly the case in women. It is often very difficult to make a differential diagnosis between inflammatory conditions of the pelvic organs and appendicitis. In gynecological practice one frequently finds the appendix involved in inflammatory conditions of the pelvic organs; so much so that in every abdominal section, no matter for what purpose, I have made it a point to carefully examine the appendix. During the last few weeks I have operated on four cases of appendicitis, in all of which the symptoms pointed to the pelvic organs rather than to the appendix. In one case the pain was referred to the left iliac fossa, and was thought to be due to adhesion, as the lady had had a double salpingo-oophorectomy done nine years previously and had complained of pain over lower part of abdomen, but chiefly in left side, ever since operation. In this case a very much thickened and enlarged appendix was found at back of cæcum, and firmly bound down to posterior peritoneum. The appendix was divided at its proximal end, and carefully stripped down to its tip and removed entire. In another case the woman had laceration of pelvic floor with retroflexion and prolapse of the uterus. She complained of constant and severe pain in right iliac fossa; this was thought to be due to the uterine condition. After repairing the pelvic floor, the abdomen was opened with the object of suspending the uterus. The appendix was found in much the same condition as the other case. An attempt was made to strip it after dividing it at its proximal end, but the tip, which was very much enlarged, was so firmly fixed behind that the appendix broke away in pieces. An incision was made in the loin, and the tip pushed out and removed through the incision in that position. I think that all morbid growths of the abdomen are better explored without delay, especially if the symptoms are obscure, and we cannot satisfy ourselves of the exact nature of the condition. This is particularly the case when the symptoms such as pyrexia, rapid pulse, etc., point to an acute, if not purulent, inflammation. With the present-day improved technique an abdomen can be explored with little danger, and that waiting for symptoms to improve or grow worse, I think, costs many lives. I think it will be generally admitted that an immediate operation is called for when there is any suspicion of the presence of pus, whether the pus is situated in the usual position for an appendicular abscess or not. Time will not allow me to fully discuss the much-vexed question, 'When is the best time to operate for appendicitis?' but I should like to say a few words on this question. I strongly hold with the American teaching that the sooner the operation is done in the acute stage the better. Treves says that the death rate from operation in the acute stage comes out at about 20 per cent., but it must be remembered that the teaching in England is to give the expectant treatment a trial and wait for operation until the symptoms are urgent. On the other hand Carstens, in the *Journal of the American Medical Association*, says: 'Statistics of cases operated on as they came along, easy cases, severe cases, purulent cases, and those actually moribund, gave a mortality of only 8 per cent. He quotes 227 cases of appendicitis. Of these 160 were operated on, with 14 deaths, or about 8 per cent., while 57 were treated medically, with 11 deaths, or a mortality of over 20 per cent.' He also points out that over 60 per cent. have recurrences, while the patients operated on are, as a rule, cured, so that we see that statistics on this subject are entirely misleading. John B. Murphy, in the *International Journal of Surgery*, says that the mortality from appendicitis is 10 per cent.,

and that if an operation is done while the inflammation is confined to the wall of the appendix this mortality may be reduced to 2 per cent. or less. It is unfair to blame the operation as a cause of death in these cases, as in a large majority of cases in this country at any rate time is lost by waiting, and an operation is only performed when the case is hopeless, or nearly so. I feel sure many cases of appendicitis might be saved if operated on before the purulent stage is reached. The case quoted by Dr. Verco might be classed as a death from operation, when manifestly it was the general peritonitis that caused death and not the operation. Personally I have seen many cases die whilst the medical attendant was waiting for the symptoms to improve or get worse, whilst I have seen very few cases die if operated on in time. Deaver says 'it is better to anticipate pus than to combat it,' and gives the mortality of appendix operations done in the presence of pus as 10 to 18 per cent., whilst that operated on in the pre-suppurative stage present a mortality of 0.5 per cent. As regards operation in the quiescent stage, Treves points out in his recent paper on appendicitis that it is desirable to remove the appendix after the first definite attack. He as well as all other surgeons who have a large experience of appendicitis affirms that the majority of cases have a second attack. He has operated on 1000 cases in the quiescent stage with two deaths, and he says 'the risk of operation in this stage is almost infinitesimal.' It would be an interesting calculation to know how many of these cases would have died if allowed to go on having recurrences, so after a patient has had one attack the averages are against him. He may at any time have another and a fatal attack, whilst he can have his appendix removed in the quiescent stage with little risk."

Dr. H. SIMPSON NEWLAND said that none of the previous speakers, nor the author of the paper, had mentioned the probable reason for an abscess in connection with the appendix arising in the right hypochondrium and so simulating pericholecystitis. The explanation was a morphological one. At one stage of its development in the fetus the cecum and appendix lay just below the liver, but finally descended to their normal position in the right iliac fossa. An abscess occurring in connection with an appendix which had undergone imperfect descent might thus appear in the right hypochondrium. As regards Dr. Hamilton's statement that Sir Frederick Treves advocated appendectomy after the first attack, the speaker was under the impression that one of the indications for removal of the appendix laid down by Sir Frederick was "repeated attacks of appendicitis."

Dr. LENDON said he was interested in Dr. Verco's first case, because he had recently been treating a case, a man of 30, as one of appendicitis in which the symptoms were referred to the right hypochondrium; the attack had subsided without suppuration. His attention had originally been drawn to this high situation for appendix trouble by some diagrams accompanying an article by Rutherford Morrison, F.R.C.S.

Drs. Hayward, Todd, and A. A. Hamilton also joined in the discussion, and Dr. Verco replied.

Drs. TODD and SWEETAPPLE read papers on cases of "Placenta Prævia." (See pp. 443 and 445.)

Dr. H. SIMPSON NEWLAND said that in considering the treatment to be adopted in a case of placenta prævia the life of the child was a factor. In certain cases it might be very important that a living child should be born. The treatment adopted by Dr. Todd almost invariably led to the death of the child. The use of Champetier

de Ribes bag, on the contrary, stopped the bleeding, and allowed the delivery of a possibly living child.

Dr. LENDON added some remarks.

Dr. J. A. G. HAMILTON said: I think the proper treatment in these cases is to rupture the membranes. The down coming head or body will, in many cases, stop the hæmorrhage; if not, and the cervix can be dilated, then apply forceps, or turn if the cervix cannot be dilated. I think a Champetier bag the best appliance to bring about dilatation. Sometimes the cervix may be too rigid and small to admit the bag. In these cases I would advise putting the patient in the lithotomy position, give an anæsthetic, and pack the uterus with long strips of iodoform gauze, then pack the vagina tightly with balls of cotton wool wrung out of vinegar and water, or some weak antiseptic, using a speculum for the purpose. In this way the hæmorrhage can be completely controlled, and in a few hours the cervix will be softened and dilatable, and Champetier's bag can then be easily introduced, when the labour will come on naturally. This is an absolutely certain way of dilating the cervix, and it also controls all hæmorrhage, and is, I think, much safer than making lateral slits in the cervix as suggested by Dr. Todd.

Dr. REISSMANN then read a paper on "Leucocytosis" (to appear in a future issue), which was illustrated by numerous diagrams and microscopic slides, all prepared by the writer of the paper, who was afterwards congratulated and thanked by Dr. Verco and others.

Queensland.

A GENERAL meeting of the Branch was held on Friday, Sept. 5th, Dr. Robertson in the chair, and 12 members were present. Visitor, Dr. Effie Stillwell.

An apology for absence was received from Dr. Hopkins, V.P.

Drs. Cuppaidge (Gympie), Holt and Egan (Warwick) were elected, and Dr. Effie Stillwell nominated members of the Branch.

Dr. BROCKWAY gave notice of motion—"That a sub-committee be formed to ascertain if a more suitable room could be obtained for the use of the Branch."

Dr. CAMERON read a paper upon "Records from General Practice—I. Abortion" (see page 458).

Dr. SALTER said that he had noticed that a threatened abortion was frequently preceded by a rise of temperature, which disappeared when the abortion had taken place. He advocated the use of ovum forceps for the extraction of remains of fetal product, preferring them to the finger.

Dr. TAYLOR said that he relied upon the ovum forceps and curette for emptying the uterus, and had also found ergot, combined with vaginal plugging, useful.

Dr. CARVOSO agreed with Dr. Cameron in reference to the relatively greater seriousness of pains as compared to hæmorrhage in threatened abortion.

Dr. HARDIX approved of the vaginal plug, and advocated the free use of intra-venous saline injections in cases where there had been copious hæmorrhage. He had always found the finger more satisfactory than the curette for emptying the uterus, and was of the opinion that the finger should always be used, even after the curette had been employed. He had often found bromide of potassium more useful than opium for allaying the pains of threatened abortion, and was in the habit of employing ergot in cases where there was hæmorrhage.

Dr. CROWES found difficulty in reaching the fundus with the finger, especially if the patient were not under the influence of an anæsthetic; he found the flushing curette a very useful form of instrument.

Dr. WILTON LOVE had abandoned the use of the vaginal plug in favour of plugging the cervix with iodoform gauze. He had noticed that cases in which hæmorrhage occurred during pregnancy often gave considerable trouble at the time of labour, either from placenta prævia or adhesions. He had never used ovum forceps for emptying the uterus. He narrated two cases in which perforation of the uterine wall had resulted from the use of the curette. He relied upon the liquid extract of viburnum for checking the hæmorrhage of threatened abortion.

Dr. WIELD preferred the use of the finger for emptying the uterus, and the flushing curette when there was difficulty in using the finger. His experience of vaginal plugging was unsatisfactory, retention of urine often resulting from its use. He preferred using long thin plugs of iodoform gauze to the cervix and vagina, not too tightly. Large doses of opium were often of value in checking threatened abortion.

The CHAIRMAN joined with the other speakers in their thanks to Dr. Cameron for his eminently practical and useful paper. He had found no difficulty in reaching the fundus with the finger if the other fingers were introduced into the vagina, the patient being under the influence of an anæsthetic.

Dr. CAMERON replied.

Victoria.

THE usual monthly meeting of the Victorian Branch of the British Medical Association was held in Pleasance's Building, Collins-street, Melbourne, on August 18th.

The President (Dr. McCansh) in the chair, and a fairly large muster of members were in attendance.

The minutes of the previous meeting were taken as read.

Dr. BECKETT read a paper on "The Treatment of Cancer by the X-Rays." (See page 450.)

The PRESIDENT suggested that, as it was getting late, it would be wise to leave the discussion of this interesting paper until next meeting; and he thanked Dr. Beckett for the great amount of time and care he must have spent in giving the Branch the results of his experience in the use of the X-rays.

Ballarat.

THE ordinary quarterly meeting was held at the Ballarat Hospital on Thursday evening, July 31st.

Present—Dr. W. Beattie Smith (president), Drs. Bennett, Champion, Courtney, Gardiner, C. F. Lethbridge, Martin, Mitchell, Morrison, McGowan, Naylor, Steele, Salmon, G. A. Scott, R. Scott, Usher and Wilson, and Mr. T. R. Treloar.

Apologies were received from Drs. Richards, Davies and Hardy.

The minutes of the previous meeting were read and confirmed.

Accounts amounting to £1 1s were passed for payment.

Correspondence was received from Drs. W. A. Wood, Alex. Lewers and Fox, and Mrs. Pinnock.

Mr. TRELOAR then introduced a large number of cases of lupus, rodent ulcer, etc., which had been or were still under X-ray treatment. These were of the greatest interest to the members present, and the extraordinary results were commented upon most favourably, the general opinion being that although this treatment was as yet in its infancy, it held out hope in a class of cases hitherto beyond treatment.

Dr. HARDY being absent through illness, his paper on "Surgical Gleanings" was ordered to be placed upon the notice paper for the next meeting.

Dr. ROBERT SCOTT then moved—"That this Branch recommends to the Board of Public Health the advisability of appointing specially qualified medical officers of health; such officers to confine their attention purely to matters relating to sanitation, general hygiene and State pathology; such appointments to be made, so far as possible, without prejudice to existing appointments."

A discussion followed, in which Dr. AFFLECK SCOTT thought that the last clause spoiled the effect of the resolution.

Dr. SALMON would keep to pathology and public health, and would not include the care of boarded-out children and vaccinations in the duties.

Dr. NAYLOR would advise that only those holding D.P.H. diplomas should be appointed.

Dr. COURTNEY wished the last clause withdrawn, as he thought that the present incumbents would be very glad to resign in favour of a central man.

Dr. SCOTT then withdrew the last clause, and with this alteration the motion was carried unanimously.

The whole question was then referred to the Council of the Branch for consideration, a report to be presented to the next meeting suggesting the best method of putting the scheme before the authorities.

Dr. W. E. DAVIES being unavoidably absent, his notice of motion was postponed till the next meeting.

Dr. SALMON moved—"That it is not conducive to the interests of the profession that lecturers to the St. John Ambulance Association should give their services in an honorary capacity."

This was seconded by Dr. Mitchell and carried unanimously. The hon. secretary was instructed to forward a copy of the resolution to the local secretary of the St. John Ambulance Association.

Dr. MORRISON opened a discussion on the relation of the Ballarat Nurses' Training School to the newly-formed Victorian Trained Nurses' Association. He did this at the request of the honorary medical staff of the Ballarat Hospital, who were anxious that their trainees should have more equitable treatment than was proposed by the association. Most of the members present took part in the discussion, and a general opinion was expressed that it was unfair to tax country nurses 10s 6d per annum without giving some compensating advantages. The idea seemed to be that this money was to be used to assist in training other nurses to come into competition with them. The difficulty of carrying out the examinations on the lines laid down by the association was pointed out, and improvements were suggested.

On the motion of Drs. R. Scott and Morrison, it was resolved—"That the Council draft a circular to be sent to all country hospitals stating our objections, and enquiring their views upon the subject; and further, that a copy of the circular be sent to the secretary of the V.T.N.A."

The PRESIDENT suggested the desirability of erecting a memorial to the memory of the late Dr. R. D. Pinnock, and the hon. secretary was instructed to invite all the members of the profession in the district to co-operate.

The hon. secretary was instructed to purchase a bookcase for the Branch, the cost not to exceed £20.

Dr. Bennett exhibited the following specimens:—

1. Atheroma of Aorta (? Syphilitic). (Dr. Champion's case).
2. Endocarditis in a newly-born infant. (Dr. Champion's case.)
3. Double Hydronephrosis. (Dr. Morrison's case.)

The meeting then closed.

Mr. L. Shannon, Mayor of Cooma, has paid to Dr. Ryan £100, together with all expenses, besides making a public apology, for alleged slander in connection with the recent hospital meeting.

REVIEW OF CURRENT MEDICAL LITERATURE.

SURGERY.

Inflammation of the Vermiform Appendix.

Treves (*Lancet*, June 28, 1902) made the above the subject of "The Cavendish Lecture" which he delivered before the West London Medico-Chirurgical Society on June 21st. He thought, although the subject of appendicitis was not a novel one, there were certain points in connection with it which were open to discussion. The sudden appearance of the disease now known as appendicitis at the end of the nineteenth century was remarkable. It is proportionately the very commonest acute malady met with in the abdomen, excepting hernia. It was not till 1886 that the name had any existence, and many now object to the uncouth term appendicitis; it lacks precision, but has been accepted by the public with an extraordinary amount of generosity. Of course, under no circumstances can appendicitis be regarded as a new disease. It is not new, but newly discovered, having been hidden for centuries under a lot of clinical facts and medical verbiage. It is a pure peritonitis; until the peritoneum is involved there is no malady. An acute attack of appendicitis is an attack of peritonitis. Fritz used the term to describe a malady that had no symptoms; he described it to indicate those changes in the appendix which preceded the implication of the peritoneum. Three facts deserved emphasising:—(1) That quite extensive changes may take place in the appendix without the production of a solitary symptom. (2) An attack of appendicitis, as we know it, may be preceded by a number of minor disturbances for which we have no name but what may be included under the title "appendicular colic." But this term is actually wrong, as there is no muscle in the appendix capable of producing the phenomenon of colic. (3) More heed must be taken of a condition that should be called chronic appendicitis, as seen in patients who have an abiding trouble in the right iliac fossa, but never an attack of appendicitis. These attacks are common enough; there is a sense of discomfort in the abdomen, a gnawing pain, a burning pain, a gripping pain, a feeling that there is something coming away there, a desire to support the back. These symptoms come under the proper heading of chronic appendicitis, and should be more fully recognised than they are now. The attempt to classify cases as catarrhal or suppurative is ridiculous. Appendicitis is an inflammatory trouble due to certain micro-organisms, and it begins as a catarrh, excepting cases of actual torsion. Eighty per cent. of cases occur in people under 30 years of age, and 73 per cent. in males. Climate appears to have considerable influence in the causation; Tropical or sub-tropical climates such as India, the Straits Settlements, China and South Africa—countries in which intestinal trouble is inevitable—contribute a large number of cases. No person suspected of trouble in the appendix should be allowed to go to a tropical country. In females the attack is often associated with the menstrual period. The appendix is situated so closely to the right ovary that it should be a routine practice to examine the latter organ in any operation for the removal of the appendix in the female. If there is one solitary factor in the production of appendicitis which is overwhelming it is a loaded cæcum. It is only a slight exaggeration to say if overloading of the cæcum could be avoided there would be little appendicitis.

Bad teeth and bolting food play an important part in the causation. The most important prophylactic treatment is to keep the cæcum free from undigested food. As regards symptoms, tenderness at McBurney's point

has become a sort of talisman. The hand of the experienced man is put on the spot, and there is tenderness, and the patient has appendicitis! Tenderness is said to be always present in appendicitis at McBurney's point and not in other diseases of the abdomen. McBurney says that it indicated the precise space of the appendix. There is a certain tenderness in the right iliac fossa in appendicitis, and McBurney's point corresponds roughly with the centre of the right iliac fossa, and therefore it is reasonably the place where tenderness is exhibited. It is a symptom quite common in other maladies, most notably in colitis. At the suggestion of Treves, Dr. A. Keith investigated the matter, and McBurney's point was found to be the seat of the ileo-cæcal valve; and the base of the appendix was found to be one inch below that point in 50 bodies prepared by formalin. A phantom appendix, described as vertical, is really due to constriction of the uppermost fibres of the rectus muscle excited by stimulating the nerve as it enters the muscle.

Operative Treatment.—It is remarkable that this subject is perfectly bewildering by divergent opinions coming from men whose authority one cannot repudiate and must recognise, and we are still lacking in reliable statistics. The mortality in hospital cases may be taken at 15 per cent., while the general rate of mortality in all cases of appendicitis may be stated as 5 per cent. As regards treatment, the whole crux is, What is to be done during an acute attack? Some say that you must operate in every case of appendicitis as soon as the diagnosis is made; others operate only on compulsion. They say, "No, the majority of the patients get well," and they only operate in exceedingly acute cases in which pus is evident, or in cases that run to an abnormal length. Treves objects to the comparing of a perforation of the appendix with a perforation of the stomach or bowel, stating that "it is monstrous, and the analogy is absolutely unjustifiable." The second fact which he pressed was: The very great majority of all cases of appendicitis get well spontaneously. The facts that operation during an acute attack of appendicitis is attended with great risk to life, and that the removal of the appendix during the quiescent period is attended with infinitely small risk, were also emphasised. If these facts are admitted, the line of treatment may be defined as follows:—1. All that we know of the pathology of inflammation of the appendix is positively opposite to the teaching that operation should be carried out the moment the diagnosis is made. 2. An immediate operation should be carried out in all the ultra-acute cases. 3. An immediate operation should be carried out as soon as there is any suspicion of pus. In 1887 Treves suggested that appendicitis when relapsing should be treated by removing the appendix during the quiescent period. Since that time he has removed over 1000 appendices with two deaths. When should this operation be carried out? What is the probability of relapse? It is safe to say that the great majority will relapse, therefore it is desirable to remove the appendix after the first definite attack. If there has been an abscess in the first attack an operation may be put out of court altogether, as that abscess will, in certainly 95 per cent. of the cases, obliterate the organ and render it harmless. With regard to chronic appendicitis, he thought that in every such case the appendix should be removed when there is no other treatment for it.

A Case of Severed Spinal Cord, in which Myelorrhaphy was followed by partial return of function.

Stewart and Harte (*Philadelphia Medical Journal*, June 7th, 1902) report the above, which they believe to be the first myelorrhaphy performed in man, as evidence

of the power of the spinal axones to regenerate. C.N., aged 26 years, white, waitress, was admitted to Pennsylvania Hospital January 21, 1901, having been shot twice with a 32-calibre revolver. One ball entered about one inch to the right of the seventh dorsal spine and passed directly into the spinal canal; the other lodged beneath the skin in the right lumbar region, and was easily removed through the wound of entrance. There was immediate and complete abolition of motion and sensation below a line transecting the lower part of the tenth dorsal spine and a point $3\frac{1}{2}$ inches above the umbilicus, the distance between the ensiform and the umbilicus being 5 inches. Consciousness was retained. The superficial and deep reflexes of the lower limbs could not be elicited. The temperature was 97.6, the pulse 120 and fair in volume, and the mind was clear. Three hours after the accident the patient was etherised and an incision 5 inches long made over the dorsal spines, with the eighth dorsal spine for its centre. The right lamina of the seventh dorsal vertebra was found to be crushed in, and the left lamina of the same vertebra fractured at its base. With the aid of forceps the spines and laminae of the seventh and eighth dorsal vertebrae were removed, and the rent in the membranes, through which could be seen the leaden bullet and a number of small fragments of bone lying between the ends of the severed spinal cord, exposed.

After removing the bullet, the fragments of bone, and the lacerated nervous tissue, the distance between the segments of the cord was three-quarters of an inch. The wound was flushed with salt solution and the ends of the cord approximated with three chromicised catgut sutures, passed by means of a small staphylorrhaphy needle, one suture being passed antero-posteriorly through the entire thickness of the cord and the other two being passed transversely. This part of the operation was attended with unusual difficulties because of the narrow space in which the suturing was conducted, because of the consistency of the cord, and because of the wide interval between the fragments, the catgut frequently tearing out before the ends were finally brought together. The dura mater could not be approximated. A small gauze drain, which was allowed to remain 24 hours, was carried down to the cord because of the oozing, the muscles were united with deep sutures of catgut and the skin closed with silkworm-gut. The patient was in a better condition after than before the operation.

Retention of urine and incontinence of faeces followed the operation. The wound in the back had closed by the seventh day; patellar reflex was detected for the first time on the 21st day; could voluntarily extend the right big toe by the 42nd day; by the fifth month was able to slide out of bed into her chair without aid; menses returned for the first time during the seventh month; was able to use the urinal and bed pan by the eighth month; by the 16th month the patient was able to voluntarily flex the toes, to flex and extend the legs, to flex and extend the thighs and to rotate the thighs. All movements were increased by strongly contracting the muscles of the upper extremities at the same time. Had perfect control over the bladder and rectum, excepting there was diarrhoea; had the sense of touch, temperature, pain, and position all over. The difference between heat and cold was not satisfactorily elicited when small test tubes were used, but more satisfactory results were obtained with a hot-water bag and a piece of ice. The muscles were moderately rigid, and there was present on both sides marked but easily exhausted ankle and patellar clonus. There were no reactions of degeneration and no trophic changes in the skin or nails.

Acute General Gonorrhoeal Peritonitis.

Hunner and Harris (*Bulletin of the Johns Hopkins Hospital*, June, 1902) contribute notes of seven cases of the above. Cushing, Frank and Mejia have previously reported cases which rest upon convincing bacteriological work. Wertheim was the first to demonstrate that gonococci can live upon the human peritoneum. The first of the cases is very fully reported. The patient, a girl of ten years, was submitted to abdominal section, bowel toilet, irrigation and closure. The patient died 36 hours after the operation. The sutures and cover-slip preparations made at the time of the operation proved sterile, with one exception, and this gave the staphylococcus cereus albus. At the time of the autopsy plate cultures were made from all the organs, with the result that the micrococcus gonorrhoeae was obtained from the two localities chosen in the peritoneal cavity: streptococcus pyogenes was obtained from the heart's blood and other organs, and also the bacillus coli communis. After minutely describing and discussing the bacteriological examinations and cultures, the authors state: "In the light of the evidence thus set forth, both clinical and bacteriological, we feel confident in affirming our belief in the case being originally, and throughout the disease, strictly gonorrhoeal in nature." Two tables are given comprising 39 cases, in 18 of which there was bacteriologic proof, and in 21 clinical evidence only. Seventy-nine per cent. of the cases operated upon recovered, while only 53 per cent. of those not operated upon recovered. Still a closer study of individual cases demonstrates the fact that numerical statistics may not represent the merits of two different methods of treatment. If the tubes contain pus in appreciable quantities they should be removed. The more progressive gynaecologists are beginning to doubt the advisability of operating for gonorrhoeal pus tubes. When pus tubes or a pelvic abscess are operated upon by puncture per vaginam, irrigation should never be used. The symptoms of an acute gonorrhoeal peritonitis—abdominal distention, tenderness and rigidity, vomiting, elevation of temperature, and frequency of pulse—are similar to other forms of general peritonitis; but the clinical course of the disease is quite characteristic. After a very acute onset and unusually stormy period of from one to three days, the symptoms suddenly abate, and the patient makes a rapid recovery. In the treatment of a case of general peritonitis due to the gonococcus, the authors recommend absolute rest in bed, hot turpentine stupe alternating every half-hour with hot water stupe, mild catharsis, liquid diet, cold sponging for the high temperature, and stimulative treatment, according to the severity of the symptoms.

THERAPEUTICS.

Eucalyptus in the Treatment of Diabetes.

The remedies hitherto advocated for the treatment of diabetes mellitus have proved so unsatisfactory that any new drug which offers a hope of better results may be welcomed. The discovery of eucalyptus as a possibly useful drug for diabetes was accidental, and we owe the first knowledge of any value the drug may possess to the experience of an old settler in New Zealand, who for years had suffered from diabetes, but had derived no benefit from any method of treatment that he had undertaken. He one day contracted an influenzal cold of a severe type, and a native woman advised him to gather some of the fresh leaves from a certain eucalyptus tree and drink an infusion of them twice or three times a day. The patient acted upon this advice, with the result that not only was his influenza rapidly cured but his diabetes also soon disappeared. Faulds, of the Glasgow Royal

Infirmary (*Glasgow Medical Journal*, May, 1902), to whom this tale was told, has endeavoured to test the value of the remedy to which the New Zealand settler attributed such remarkable results, and in 15 out of 46 cases upon which it has been tried he reports total disappearance of the sugar, and, so far as can be judged, a complete cure. Twice daily an infusion of one table-spoonful of the broken, dried leaves of eucalyptus globulus in six ounces of water was administered.

In one case the patient was passing 40 grains of sugar to the ounce of urine, and the improvement was almost immediate. In a second case, a girl, of 18 years of age, was passing 60 grains of sugar to the ounce of urine. After four days' treatment only one grain of sugar per ounce was passed, and on the sixth day none was present in the urine. She was then put on a farinaceous diet, but the improvement was maintained. Faulds thinks that the remedy is only of use in cases due to gout, over-indulgence in food, or cold. It does not appear to be of service in cases of diabetes consequent on vaso-motor changes affecting the blood supply to the hepatic cells. Twenty-two cases with a neurotic temperament and with a family history of diabetes showed no improvement under the treatment. Four cases almost comatose were also unsuccessfully treated. It is not known to what ingredient in the leaves the good results are due, since the substitution of eucalyptus oil or eucalyptol for the fresh infusion was followed by no good results.

Treatment of Disorders of the Blood.

A. E. Wright (*Lancet*, July 5th, 1902), in a paper on some new procedures for examination of the blood, deals with some therapeutical aspects of his work on the coagulability of the blood. 1. In the treatment of aneurism by gelatine injections he urges the importance of ascertaining both before and after such injections the degree of coagulability of the blood. If the treatment is successful, that is, if the coagulability of the blood is increased, there is, of course, a danger of intra-vascular thrombosis and sudden death. Hence, precautions should be taken against such accidents by measuring the coagulability of the blood during the treatment, and steps should be taken to diminish that coagulability as soon as evidence is obtained of impending danger. 2. In the prophylactic administration of calcium chloride to patients on the eve of operations in which hæmorrhage is feared, before proceeding to operate, the blood should be examined to ascertain whether it has acquired the particular degree of coagulability which is desired. 3. In cases of severe intestinal ulceration in typhoid fever or where hæmoptysis threatens in tuberculosis of the lungs, it is possible to seek warning by ascertaining the coagulability of the blood; the mere fact of blood flowing profusely from a prick in the finger would convey the necessary warning, and the administration of calcium chloride would avert the hæmorrhage. 4. Thrombosis, which is a frequent complication of convalescence from typhoid fever, can be prevented by taking steps to reduce the coagulability of the blood after the danger of hæmorrhage has passed. At the Royal Victoria Hospital at Netley every convalescent typhoid fever patient has now two lemons a day added to his dietary. In striking contrast to what was previously the case, only one case of thrombosis, and this one of the mildest description, has developed among some 90 consecutive cases of typhoid fever treated in this way. 5. Urticarias, consequent upon soap enemata and upon the ingestion of acid fruits and vegetables such as rhubarb, are due to a diminution of blood coagulability, and they can be experimentally produced by the ingestion of citric acid, which is known to diminish the blood coagulability. The therapeutical indication in the treatment of these conditions is, therefore, the administration of calcium chloride.

The Use of Sodium Salicylate.

Homburger (*Rev. de Therap.*, lxi., No. 7) points out that sodium salicylate is easily soluble, and should not cause any gastric intolerance. The reason of its doing so on some occasions he attributes to the formation of salicylic acid under the influence of the hydrochloric acid of the stomach. If this is neutralised by the addition of sodium bicarbonate, carbonic acid is liberated, and this latter stimulates the absorption of the sodium salicylate. The solution of the sodium bicarbonate and sodium salicylate should not be given too dilute, as this tends to delay it in the stomach, and it should not be given near meal time.

Sparteine.

Thomas (*Rev. de Therap.*, lxi., No. 7) records his experience in the clinical use of this remedy. Its diuretic effect is not very marked, the amount of urine voided after its use not exceeding 60 oz. The heart-beats become regular and strong after its administration, and this effect lasts a varying time, according to the condition of the heart. Comparing sparteine with digitalis, he finds that the former is less powerful, the effect less permanent, but it is also less cumulative and toxic in its effects than the latter. As compared with caffeine, he finds that the latter is useful in cases requiring prompt stimulation, and after the crisis has passed he uses sparteine for regulating and reinforcing the heart. In chronic cardiac affections it may replace digitalis and aid its action. The chief indications for its use are chronic myocarditis, the beginning of asystole, and the subjective phenomena of cardiac irregularity. The coincidence of hepatic and pulmonary complications require more energetic remedies. The sulphate of sparteine is easily soluble and suitable for injections and mixtures, or it may be prescribed in pill form. Not more than 3 grs. should be given in 24 hours. Hypodermically, $\frac{1}{2}$ gr. three times daily is a maximum dose.

Methylene Blue as a Nerve Sedative.

Hughes and Lovelace (*Philadelphia Medical Journal*, March, 1902) record the use of this drug in the insane wards of the Philadelphia Hospital. The histories of 22 cases are given in full. The drug was administered either hypodermically, 1 gr. being used as a dose, or in capsule by the mouth, 2 grs. being given. Nearly all the cases were of wild excitement, and in only six cases did it fail to produce a calmative effect not accompanied by dulness or hebétude. The effect was noted in three to four hours after a dose was given, and lasted from 15 to 24 hours. No depression resulted, except in one case, and the quieting effect of the drug by stomach administration was not followed by any stomach derangement.

DISEASES OF EAR, NOSE, AND THROAT.

Relation between Dry Angina and Kidney Disease.

Joal (*Rev. de Laryngol.*, March, 1902) states that 20 years ago he called attention to the value of sore throat of the dry type as an early sign of kidney disease. Experience has confirmed the importance of this sign, even before the appearance of albuminuria or other symptoms of the kidney trouble. The chronic pharyngitis in these cases has no distinctive characteristics which differentiate it from other affections of the throat occurring in the course of nutritional disorders or in the aged; but the dryness and absence of any inflammation of the naso-pharynx or nasal fossæ should always suggest the possibility of insidious Bright's disease.

Usually, the patient has long been troubled with his throat, and has been treated for cough, hoarseness, etc. The ordinary pharyngitis becomes gradually transformed under the influence of the kidney disease into the dry type with slow hypertrophy of the pharyngeal mucosa, yielding later to atrophy. The mucosa becomes gradually greyish and dry at certain points, in marked contrast to the congestion of the velum and anterior pillars. There is no pain, but the sensation of dryness in the throat impels to frequent drinking.

Immediate Suture of the Air Passages after Operation upon the Trachea and Larynx.

E. J. Moure (*Rev. de Laryngol*, March, 1902) considers broncho-pneumonia as the most common and formidable complication of operation upon the larynx and trachea from the exterior. This may result from the penetration of blood, from the direct introduction of cold air, or from wound infection. He always operates in a well-heated room, prefers posture rather than special tampons (Trendelenberg or Hahn), and advises immediate suture of the wound without using a tracheotomy tube.

Ichthargan in Nose and Throat Diseases.

Douglas (*Laryngoscope*, May, 1902) recommends this new preparation of ichthylol and silver. He finds the solution of 1·20 in water or glycerine the most satisfactory for general use. It combines the good effects of ichthylol with those obtained from silver. He strongly advises its use in atrophic rhinitis where an antiseptic or stimulant for the circulation and the functional parts of the mucous membrane and an alterative effect on the connective tissue are required. He states that in 50 cases of atrophic rhinitis he has had better results from ichthargan than from any other form of treatment. He also recommends it in catarrhal conditions of the larynx.

Treatment of Atrophic Rhinitis by Interstitial Injections of Paraffin.

A. Druault (*Presse Med.*, June 7th, 1902) states that the aim of the treatment should be the permanent diminution of the calibre of the nasal fosse, and the modification of the glandular secretions. By altering or destroying the mucous glands, the formation of these oily drops, which dry and form crusts, is prevented, while the ozæna, which is directly due to the stagnation of incrustated secretions in the retracted fosse, is also cured.

The writer has tried Eckstein's method of paraffin injection in ten cases. A paraffin which melts only at 60° is used; it solidifies almost at once, is not reabsorbed, and is readily tolerated by the tissues. At the first operation two or three cc. of paraffin are injected under the mucous membrane at the posterior part of both inferior meatuses. A few days later the same process is performed at the anterior part. A syringe with a long needle is used. The paraffin is heated to 65 to 70°. Cure resulted in those cases in which the meatuses were successfully reconstructed. They then remained somewhat swollen, giving the impression of slight hypertrophic rhinitis. The ozæna disappeared completely, and no painful sensations were complained of, except in two cases in which phlebitis of the facial vein followed. The writer believes this was due to a too large quantity of paraffin having been injected at one time. Though the permanence of the results cannot be guaranteed, the method promises to be useful in a large number of cases.

R. Lake (*Laryngoscope*, May, 1902) relates a case of a woman, aged 25, who had been affected with fetid atrophic rhinitis for many years. Crust formation had been got under by the usual treatment, but the patient was dissatisfied, as she felt no air passing down the nose.

The injections were made under the posterior surfaces of the inferior turbinal, about m. v. each time, with intervals of one week. The total increase of length obtained was not great, but the relief was most satisfactory to the patient. The needle required was one of fair calibre, three inches in length, and attached to the syringe by means of a screw. The syringe employed was one with metal bands, and worked with a screw piston to overcome the friction caused by the long needle.

The Relation of the Nose to the Reproductive Organs.

C. N. Cox (*Brooklyn Medical Journal*, July, 1902) enumerates some observations which corroborate the idea of relationship:—

1. Engorgement of the turbinated bodies in certain women occurs with unvarying regularity during the menstrual period. This congestion often causes intense headache, due to a swollen middle turbinal pressing against the septum. This can be relieved by local applications to the nasal cavities.

2. Vicarious menstruation as manifested by hæmorrhage from the nose.

3. Certain nasal reflexes, such as congestion, sneezing, etc., have been observed during sexual excitement.

4. Nasal disease is frequently affected by menstruation, uterine and ovarian disorders, and the menopause. Thus the foæta of ozæna is generally more pronounced during menstruation, while there is apt to be marked mitigation of the symptoms of atrophic rhinitis after the menopause.

5. The relief of painful menstruation by intra-nasal applications has been reported by many authors. Schiff proved that the pain of dysmenorrhœa was relieved promptly in 34 cases out of 37 by the application of 20 per cent. cocaine to the turbinals. Chrobah in 17 cases cauterised the turbinals during the menstrual interval with no return of the dysmenorrhœa in 12 cases.

Indications for Ossiculectomy.

Macleod Yearsley (*Med. Times*, July 5, 1902) states that when there is a persistence of purulent discharge with a perforation of Shrapnell's membrane, chronic attic trouble is indicated. The chief cause of this persistence is caries of the head of the malleus or body of the incus or both, or of the external attic wall. Nothing short of removal of the bones in question, together with removal of the outer attic wall, will be of use, and unless there be indications for opening the antrum this should certainly be done before proceeding to the more grave mastoid operation. When discharge persists with a perforation in the posterior-superior segment of the membrane the usual cause is caries of the descending process of the incus, a complication by which the attic may later become secondarily affected.

The *New York Medical Record* (June 21st, 1902) contains accounts of the facilities for post-graduate instruction in England, Germany, and Austria, which may be of service to readers intending to visit Europe.

SULPHAQUA.—We have received from the Seltzogene Patent Charges Co., of St. Helens, Lancashire, England, samples of the above for the production of the Hygienic Nascent Sulphur Bath. Sulphaqua consists of two powders, which are dissolved separately in hot water and then mixed and added to an ordinary bath, when sulphur is precipitated in a very fine state of division with evolution of sulphurous acid. We understand that a trial has been made of this preparation by the skin physicians at both the Sydney and the Prince Alfred Hospitals with very satisfactory results. Some cases of eczema and cases of psoriasis are greatly benefited by it.

CORRESPONDENCE.

London.

(FROM OUR OWN CORRESPONDENT.)

Death of Dr. W. M. Ord—Leprosy in America—Age in Reference to Cancer—Linen Thread in Surgery—The New Governor of Wei-Hai-Wei.

By the death of Dr. Miller Ord, which took place at his son's residence at Salisbury on the 14th May, the profession of medicine has lost one of its brightest ornaments, and one who for many years enjoyed the reputation of being a great and successful clinical teacher. Dr. Ord was born in 1834, and was therefore in the 68th year of his age. He was the son of a doctor, and received his education at King's College School and at St. Thomas's Hospital. His original intention was to enter upon general practice as the work of his life, and with this view he commenced his professional career as assistant to his father. Notwithstanding all the calls which the demands of a large general practice made upon his time, Dr. Ord never lost touch with his old medical school, and his original intention to devote his life to family practice was altered by the offer of the Chair of Zoology at St. Thomas's, which he accepted.

Subsequently he was appointed assistant physician to the hospital, and relinquishing private practice altogether he established himself as a consultant in Upper Brook-street. In 1876 he was elected to the Fellowship of the Royal College of Physicians, and he became full physician to St. Thomas's in 1877. In 1898 he resigned the post of physician to the hospital, and was thereupon appointed consulting physician.

During his long and very active professional career he did much literary work, in addition to the ordinary routine of his hospital and private practice. It is to him we owe most of our knowledge of myxœdema, and in many other departments of clinical work he made substantial contributions to the progress of scientific medicine.

He was essentially an enlightened and highly educated man, brilliant as a teacher, generous to a fault, pre-eminently skilful in the treatment of disease, and the "guide, philosopher, and friend" of every one whose privilege it was to know him well.

A report to Congress has just been made by a Commission of Surgeons appointed some time ago to investigate the origin and prevalence of leprosy in the United States. The report states that there are at present 278 cases scattered throughout America. Of this number, 176 are males and 102 are females; 145 are American citizens, 120 are foreigners; the nationality of the remainder has not been determined. From evidence given before the Commission it appeared that 186 patients had contracted the disease in the United States, but the commissioners were of opinion that some of these cases were imported. Many of the patients are at large, but would be willing to be cared for at the public expense if proper isolation hospitals existed for their maintenance and treatment.

In an interesting paper communicated by Dr. Tatham to a recent issue of the *Dublin Journal of Medical Science*, it is clearly established that the old theory that the proclivity to cancer is greatest in the period immediately succeeding middle age is fallacious, and it is made quite clear that the proneness to cancer is in direct ratio to the senility of the organism. The following table on

the mortality rate from cancer in England and Wales in each sex during 1900 is quoted:—

All ages	Annual death rate per 1,000,000 living at each age.	
	Male.	Female.
Under 35 years ..	672	975
35-45 ..	44	66
45-55 ..	418	924
55-65 ..	1483	2433
65-75 ..	3796	4561
Above 75 years ..	5735	6254
	6715	7468

It thus appears that of those living under the age of 35 years, only 110 per 1,000,000 die annually from cancer, whilst of those living above the age of 75 years, no fewer than 14,000 die. This is a most important demonstration, which definitely places senility of tissue in its proper place as a predisponent to malignant disease. It further proves that the increase in average longevity which has characterised the last century has probably taken an important share in the cancer-mortality increase, which has been such a striking feature of the death rate returns.

In a recent issue of the *Lancet*, Mr. Arthur Barker, of University College Hospital, contributes an article on the choice of materials for use as ligatures and sutures, and draws special attention to the value of linen thread: now so largely used by tailors and seamstresses. He points out that it can be procured anywhere the world over wherever there is a depôt for Singer's sewing-machines; that it is relatively very cheap; that it can be readily sterilised by boiling in plain water and then, storing in methylated spirit; that it is exceedingly strong and ties a reliable knot; and that it runs readily through the eye of any suitable needle. It can be used in any size, but Mr. Barker finds that three thicknesses, Nos. 40, 60, and 90, are sufficient for all purposes. To those who are engaged in practice far from the busy haunts of men this linen thread should prove of serviceable value.

On the occasion of the departure from Hong Kong of the Hon. J. Haldane Stewart Lockhart, C.M.G., Rector of the Hong Kong College of Medicine for Chinese, to take up the Governorship of Wei-Hai-Wei, he was presented on April 9th last by the members of the Court, the Senate, and the General Council with, an extensively signed address. The meeting at which the address was presented was presided over by his Excellency Major-General Gascoigne, the officer-administering the government of the colony, who was supported by a large number of well-known local men. The Hong Kong College of Medicine for Chinese was founded in 1887 by Dr. Patrick Manson. Mr. Stewart Lockhart was then appointed treasurer to the College, a post which he held till 1895, when he was elected Rector, in succession to his Honor Sir Fielding Clarke, Chief Justice of the colony.

Scotland.

(FROM OUR OWN CORRESPONDENT.)

The King's Illness—Coronation Honours—Mr. Carnegie's Gift to the Scottish Universities—New Medicine Graduates—Australian Cricketers in Edinburgh—A New Institute of Public Health—Edinburgh University Items.

SUMMER has at last burst upon Scotland after an exceptionally cold spring; strangely enough, the welcome change came at the right moment, when decorations were being put up for the Coronation of the King, and a holiday spirit had settled over the country; then came

the sudden and alarming tidings of his Majesty's illness, the rejoicings were checked, but with the rapid announcement of more favourable news, and the persistence of brilliant weather, Scotland held some of its intended festivities, though tempered by changed conditions and the absence of official co-operation. Glasgow University finished its summer session as usual early in June, the other universities had official holidays from the Wednesday to the end of Coronation week, and the King's illness came too late for them to be cancelled. It has been in some respects a season of disappointments. Edinburgh University had arranged to confer the honorary degree of LL.D. on each of the colonial Premiers, and the 17th of June was fixed for the occasion and was looked forward to with great interest; the city authorities had also made suitable provision for their entertainment. As the 17th drew near it was found that many of the Premiers would still be on the ocean, and others unable to come, and the ceremony had to be postponed till after the Coronation. Nothing further has been notified as yet, but it is hoped that the Premiers may be able to attend the big annual capping on the 28th of this month. This is the great medical graduation day in Edinburgh, and a notable occasion for Edinburgh medical graduates; it will be a specially brilliant function this year if the representatives of the "Britains beyond the Seas" are also capped.

Scottish medical men have come in for a good share of the Coronation honours. Sir William MacEwen, Glasgow's celebrated surgeon, received a knighthood; and Sir Thomas Fraser and Sir John Halliday Croom were the recipients of the same honour. Scotland may in addition claim Sir A. Conan Doyle, who is an Edinburgh graduate, but has won his spurs chiefly in the field of literature.

Mr. Andrew Carnegie's gift has been in operation for nearly a year, and so far little apparent change in the four teaching centres has been noticed. The grant for teaching purposes has not yet been apportioned, and will not nearly cover the requirements of the universities. Edinburgh extramural teachers are afraid that they will be the losers owing to the decrease in numbers of the students attending their classes; certainly it would seem that the Carnegie students have mostly attended the university this summer, though they can take out extramural classes and have their fees for them paid out of the fund. It would be a great misfortune for the Edinburgh school if the Carnegie gift were ruining the extramural system. The experience of one summer is not sufficient to warrant any conclusions on this point, and it may be after all a fluctuation quite independent of the Carnegie gift. Mr. Andrew Carnegie is at present living in his Highland residence at Ikibo Castle, and as Lord Rector of St. Andrew's University is to give his address at the opening of the winter session.

Among the Edinburgh graduates in medicine this summer are eleven Australasians, many of whom are well known in university circles. H. H. Bullmore, of Queensland, president of the University Union, and one of the Scottish Rugby representatives last winter, receives his M.B., Ch.B. on the 26th. A. N. Fell, a New Zealander, and captain of the University fifteen and Scottish representative, is also to be capped then. The Australasian Club are giving their annual dinner in honour of their graduates on the 11th.

The Australian cricketers paid a visit to Edinburgh towards the end of June, and played against the Scotch team. The visit was an unexpected one, and only rendered possible by the postponement of the Coronation leaving them several unoccupied days. The visitors won by a very big margin, and their cricket was much appreciated, and will without doubt stimulate the game in Scotland. There is an Australasian cricket team

composed chiefly of medical students and graduates, who play in Edinburgh regularly; and one of the old members of this team, Dr. Campbell, was one of the most conspicuous of the Scotch representatives.

A new institute of public health has recently been opened in Edinburgh, and handed over to the University under the charge of Professor Hunter Stewart. It is a handsome and beautifully fitted up building in the Warrender Park district, a gift by Sir John Usher. Considerable irritation was caused to medical men in the city by the transference of the municipal work from the College of Physicians laboratory to the new institute, and that in spite of the recommendations of the public health committee of the Town Council. The College of Physicians had always done the city work and done it well, and at first received no remuneration, though latterly they have been in receipt of an annual grant of £100. Now the work has been suddenly transferred to the new institute, and the annual grant raised to £250. The College of Physicians laboratory is still carrying out the examination of, and reports on, specimens sent to them by medical men in the city, but it is doing it unofficially. The institute will be a great help to the University, and leaves more room to the department of medical jurisprudence presided over by Sir Henry Littlejohn.

Improvements are shortly to be made in the department of pathology, and considerable extension of the accommodation for teaching is required, and is likely to take place soon. A considerable sum of money was recently left as a bequest, to accumulate till sufficient to endow a chair of bacteriology in the University; some years must elapse, however, till it is available.

The new buildings in the Edinburgh Royal Infirmary for eye and ear patients are being rapidly completed, and it is rumoured that the King will open them if he comes on a visit to Edinburgh in the autumn.

Mr. Shaw MacLaren, examiner in surgery to the University, and honorary surgeon to the Infirmary, has sent in his resignation prior to his departure for India to take up medical missionary work there.

Edinburgh, July 10th, 1902.

THE BATTLE OF THE CLUBS.

(To the Editor of the Australasian Medical Gazette.)

SIR,—Some medical men in our town are desirous of establishing a benefit fund to provide sick pay and funeral allowances in connection with a medical and surgical fund. In forming such an additional department we desire to retain the sole, or at least half management, as is done in Cork, Ireland. On referring the proposition to Mr. Coghlan we were told that he could not register such an association.

Can any of the readers of the *Australasian Medical Gazette* inform us, through your columns, if registration be necessary to carry out our intentions? Will the medical staff be able to retain control solely or partially, as in the Irish association?

Any hints will be gratefully accepted by yours, etc.,
Sept. 4th, 1902. SIR WAGMAN.

CHLORIDE OF ETHYL AS AN ANÆSTHETIC.

(To the Editor of the Australasian Medical Gazette.)

SIR,—I shall esteem it a favour if some of your readers will give me their experience of chloride of ethyl or its preparations, such as narcotile, somnoform, in its application as a general anæsthetic.—Faithfully yours,

TIMOTHY W. LEE.

Wollongong, Sept. 6th, 1902.

Australasian Medical Congress, 1905.

At a meeting of the South Australian Branch of the British Medical Association held on May 29th, 1902, at 8 p.m., at the University of Adelaide, nominations having been received for the executive committee of the Australasian Medical Congress to be held in Adelaide in 1905, the following gentlemen were elected by ballot:—Drs. T. W. Corbin, W. A. Giles, J. B. Gunson, J. A. G. Hamilton, R. H. Marten, M. J. Symons, E. E. Todd, J. C. Verco, A. Watson. Dr. W. T. Hayward was elected honorary treasurer, and B. Poulton general secretary.

The above committee, at the request and suggestion of the president, Dr. E. C. Stirling, invited all the gentlemen nominated for office at the above meeting to join the committee, and desired their attendance at the first meeting of committee to be held on July 17th, 1902. The gentlemen so invited were:—Drs. T. Borthwick, Brummitt, Cavenagh-Mainwaring, W. L. Cleland, A. H. Gault, A. A. Hamilton, J. A. G. Hamilton, T. K. Hamilton, R. E. Harrold, M. R. H. Jay, A. A. Lendon, A. M. Morgan, B. Smeaton, H. Swift, A. E. Wigg.

On July 17th the committee added the following names to their number:—Dr. J. Johnson, Dr. M. P. O'Leary, Dr. Aitken, Dr. H. A. Powell, Dr. T. James, Dr. E. L. Archer, Dr. R. W. Stewart, Dr. J. H. Drummond, Dr. I. H. Evans, Dr. E. W. Morris, Dr. W. A. Shone, Dr. F. Goldsmith.

On August 7th the general committee met and decided to conduct the business of the next session in seven sections as follows:—1. Medicine; 2. Surgery; 3. Gynaecology and Obstetrics; 4. Eye, Ear, and Throat; 5. Anatomy, Physiology, Pathology, and Pharmacology; 6. Public Health; 7. State Medicine and Medical Ethics; and that the following gentlemen be requested to act as sectional secretaries:—1. Dr. H. Swift; 2. Dr. W. A. Giles; 3. Dr. J. A. G. Hamilton; 4. Dr. T. K. Hamilton and Dr. Symons; 5. Dr. W. R. Cavenagh-Mainwaring; 6. Dr. T. Borthwick; 7. Dr. A. A. Hamilton. Dr. J. B. Gunson was elected assistant secretary. It was decided that the president, the treasurer, and general secretary be *ex officio* members of all committees of Congress.

It was decided that the secretaries of sections should be requested to consider and report on the questions of presidents and vice-presidents of sections and local secretaries of Congress.

The president, treasurer, secretaries, the secretaries of sections, with Drs. J. C. Verco, Marten, Lendon, and Jay, were appointed an executive committee for the conduct of all ordinary business of the Congress.

The president intimated that it was desirable subscriptions of £1 1s should be paid to provide for expenses to be incurred.

A Customs Puzzle.—The commercial columns of the Melbourne *Argus* contain the following:—"We have refrained from referring to specific cases of hardship originating from the exercise of authority at the Custom-house, but the following singular case, the decision upon which has been yielded to for the sake of peace and quietness, may be referred to. Condyl's fluid is a disinfectant. It was proposed to levy a duty of 15 per cent. on disinfectants, but the House decided that they should be duty free. Thereupon the Minister for Customs had decreed that Condyl's fluid is not a disinfectant, but a medicine, and must pay duty as such, the duty as revised being 15 per cent. Not only was such a decision promulgated, but the importers discovered that although they had been importing the article for many years as a disinfectant they were liable to be haled into the police courts for passing false declarations."

PUBLIC HEALTH.**New South Wales.**

**ANNUAL REPORT OF DR. W. G. ARMSTRONG, THE
MEDICAL OFFICER OF HEALTH METROPOLITAN
COMBINED SANITARY DISTRICTS,
FOR THE YEAR 1901.
(Abstract.)**

The census of 1901 showed that the increase of population in the metropolitan area was considerably greater than had been calculated in the estimates of the years immediately preceding. The institution of a quinquennial census in Sydney is much to be desired, as under the decennial system the errors which frequently arise in the estimation of population towards the end of intercensal periods are great. The error in the case of the metropolitan district of Sydney in the year 1900 amounted to an under-estimation of the population by nearly 40,000. The increase of population was general, and was not confined to any district or group of districts. The salutary effects of the visitation of bubonic plague in 1900 have continued to be felt. In the city there has been a marked change for the better in methods of sanitary administration, and a good deal of work has been done. The State Government has intimated its intention of introducing into the 1902 session of Parliament a Public Health Amending Bill, which will give the Department of Public Health important powers in the direction of the control of dangerous epidemics, and will improve the position of local sanitary authorities financially.

In July the State Government, on the advice of the Department of Public Health, appointed Dr. Edward Stokes, M.B., Ch.M. (Sydney), D.P.H. (Dublin), to the position of Assistant Medical Officer of Health for the Metropolitan Combined Sanitary Districts. Dr. Stokes took up his duties on August 6th.

There are several matters in respect of which improvements in the sanitary state of the metropolitan districts might and ought to be brought about. Perhaps the most important of these is a better system of sanitary inspection of their districts by suburban local authorities. House-to-house inspection of their districts should be performed by all municipal local authorities as a matter of routine. Better methods of dealing with house garbage are required. In many cases local authorities could combine to instal plants for the destruction of garbage by fire. The exemplification and extension of the present system of sewerage is urgently indicated. This statement applies particularly to those portions of the city and suburbs which are situated on the low-level districts bordering on Port Jackson. The sewerage of those districts continues to be discharged into the harbour by old and generally badly-constructed drains, whereas they should be connected with the general system by means of low-level pumping stations. On the landward side the extension in the connection of districts and houses with the sewerage system is progressing well.

Many by-laws for the furtherance of the public health might be made and enforced by local authorities under the Municipalities and Nuisances Prevention Acts. Stables, for instance, which are frequently the cause of abominable nuisances, might be so brought under control as to make them perfectly sanitary and unobjectionable.

VITAL STATISTICS.—The births of the year numbered 12,601, of which 6414 were males and 6187 females. The number of illegitimate births was over 10 per cent. of the total births. The indicated birth-rate for the metropolis was 25.65 per 1000 of the population, which

is considerably less than the mean birth-rate of the 10 preceding years.

The number of deaths which should be debited to the metropolis is 6008, equivalent to an annual death-rate of 12.39 per 1000. The rate is exactly the same as the death-rates recorded in 1900 and 1899.

SCARLET FEVER.—Eight hundred and eighty-four cases occurred in the metropolitan district, of whom 360 were males and 524 were females; there were 8 cases in children under 12 months of age. Thirteen deaths from scarlet fever occurred, a mortality rate of .02 per 1000 of the population and 1.47 per cent. of notified cases. Of the total of 884 cases of scarlet fever, only 146, or rather less than one-sixth, received hospital treatment, so that, practically speaking, there was no isolation for scarlet fever practised. Isolation in private houses, especially among the poorer class of persons, cannot ever be said to be efficient.

DIPHTHERIA.—Diphtheria was more prevalent than it has been since 1898, the first year in which notification came into effect; 439 persons were attacked, and the attack rate was .95 per 1000 living. The bulk of the incidence was on children from 1 to 10 years of age. Only 4 cases occurred among infants under 12 months of age, and none under 6 months were affected. There were 65 deaths, representing a mortality rate of .13 per 1000 living, and a case fatality equal to 14.82 per cent. of the cases notified.

An outbreak of diphtheria numbering 15 cases occurred at Balmain in January, in connection with a dairy. On visiting the premises I found the cows all in good health and free from eruptions or other lesions on the milking udders and teats. Further inquiries brought to light that a daughter of the dairyman, usually living on the dairy premises, had suffered with a slight sore throat about a fortnight before the date of my visit. I took swabbings from this child's throat, as well as from those of the other occupants of the dairy. Meanwhile several additional cases of diphtheria were notified among customers of the dairy. On examination I found that the swabbings from the throat of the child who was said to have had sore throat and from the throat of a younger brother yielded cultures of the diphtheria bacillus. These children were sent at once to stay with a relative in the country for a few weeks. After their departure and a thorough disinfection of the dairyman's residence, together with the milk room and milk vessels, no more cases of diphtheria occurred among the customers of this particular dairy. This outbreak is an illustration of the ease with which infectious disease may be disseminated through the agency of milk. Undoubtedly one at least of the dairyman's children had suffered from an attack of diphtheria, so mild that no notice was taken of the slight indisposition it caused. There were many opportunities for the infection of the milk, as the milk room stood immediately outside the back door of the residence and the dairyman's children had free access to this room, and occasionally used to carry the milk for delivery to such customers as resided in the immediate vicinity of the dairy.

TYPHOID FEVER.—Eight hundred and twenty-nine cases of typhoid fever were notified during the year. This is 35 less than the average annual number for the three years preceding 1901, during which notification has been enforced. The attack rate on the population of the metropolis was 1.71 per 1000 living. Eighty-one deaths were registered, the mortality for the whole metropolis being .17 per 1000 living. The case fatality equalled 9.77 per cent. of notified cases.

Incidence on Households.—Eight hundred and twenty-nine cases of typhoid fever were notified from 764 houses; 709 houses contributed 1 case

each, 45 houses each contributed 2 cases, 7 houses furnished 3 cases each, and 3 houses 4 cases each. In a majority of the dwellings in which multiple cases of illness occurred the interval between the first and successive cases was such as to suggest strongly that infection had been in some manner conveyed from the first patient to those who sickened later. These facts point clearly to the danger which arises to the household from the treatment of typhoid fever at home, unless sufficient room space for efficient isolation and trained nursing skill are available. In small, crowded houses there must always be a risk of infection passing from the sick person to the other inmates, and few households have at their command such skill in nursing, and the proper use of means of isolation and disinfection, as to qualify them to deal safely with a case of typhoid fever.

Sanitary Condition of Houses Attacked.—The incidence of typhoid fever on sewered houses in the metropolitan district was 1 case for every 136 houses; among houses served by pail closets 1 case occurred in every 80 houses; and among houses served by cesspits 1 case occurred in every 26 houses.

The outbreak in Balmain was extensive and prolonged. The total number notified from the borough during 1901 was 183, as against an annual average of 72 for the three preceding years. Careful investigations into the origin and course of the epidemic were made from time to time, but did not disclose any striking facts bearing upon the means of spread. It was possible to exclude altogether the question of water supply, and no evidence could be obtained which seemed to incriminate milk or any other food supplies.

Balmain was wholly without sewers until the middle of 1898; but since that time sewage reticulation and connection of dwellings has been pushed forward with energy, and at present 65 per cent. of the dwellings are connected with the sewers. It is possible that an extensive disturbance of the upper layers of polluted soil, such as occurs during the construction of large numbers of new sewers and house drains in a district, may be answerable in part for the dissemination of typhoid fever in this district during the past two years.

TUBERCULOSIS.—Six hundred and twenty-seven deaths from tubercular diseases occurred during the year 1901. Of these, 516 were attributed to phthisis, 46 to tubercular meningitis, and 65 to other tubercular diseases. These numbers are slightly higher than those of the previous year. The figures for phthisis indicate a death-rate of 1.06 per 1000, while the death-rate for phthisis, plus all other forms of tuberculosis, was 1.29 per 1000.

The local authority of the city of Sydney has made the disinfection of dwellings in which deaths from phthisis have occurred a matter of routine. A by-law passed by the same authority, prohibiting expectoration on the footways, and, firmly enforced, has been another step in the right direction. The provisions of a similar by-law should also be applied to trams and other public vehicles plying for hire. Balmain and some other suburban districts have imitated the action of the city in prohibiting spitting on the footpaths.

DIARRHOEA.—Diarrhoeal diseases, which are taken to include diarrhoea, enteritis, infantile cholera and dysentery, were the cause of 683 deaths, yielding a death-rate of 1.41 per 1000 living. Of these deaths, 611, or 89 per cent., occurred in young children under 5 years of age, and 515 were those of infants under 12 months.

BUBONIC PLAGUE.—The epidemic of bubonic plague of 1900 came to an end on August 9th of that year, and from that date until the middle of November, 1901, Sydney was free from any recurrence. On November

14th, 1901, a carter employed at a produce store in the city, and residing in Alexandria, was diagnosed to have plague. Numbers of dead rats were discovered under the wooden floors of the produce store, and some of them, on bacteriological examination, were found to have had plague. A second case occurred on December 10th in a druggist, who resided at Waverley, but was employed in the city, in a dispensary not far from the produce store where patient No. 1 worked. This second case ended fatally. No other cases of plague came under observation during the year 1901. The City Council passed and enforced by-laws, requiring that produce stores should be provided with floors of concrete or some other material impervious to rats.

SMALL-POX.—On three occasions during 1901 Sydney was invaded by small-pox, coming from abroad over-sea. In all these cases the energetic measures taken by the Department of Public Health were fortunate enough to prevent any extensive outbreak of the disorder on shore, but sooner or later there is very little doubt that small-pox will succeed in breaking down the barriers which are erected against it, and will establish itself in the State. We are an unvaccinated community, and the experience of Europe is that vaccination and revaccination of the people are the only reliable safeguards against the eventual occurrence and spread of small-pox. To form a correct idea of the unprotected condition of the population of Sydney in this matter, it is only necessary to compare the number of births with the number of vaccinations performed in the last ten years. The births in the metropolis during that period have been 127,169, whereas the total number of vaccinations performed during the same period was 2507.

CEREBRO-SPINAL FEVER.—Thirty-eight deaths from cerebro-spinal fever were registered. It was most fatal among the young. Twenty deaths, or 53 per cent. of the total number recorded, occurred in children between 1 and 15 years of age.

THE DAIRIES OF THE DISTRICT.—The conditions of the dairies of the metropolis during the year 1901 were unsatisfactory. Especially in the cleanly upkeep of dairy premises was there much fault to be found, but the structural conditions were much more satisfactory. Classifying all dairies in accordance with the classification of the Department of Public Health as "good," "fair," and "bad," of the 537 dairies in the metropolitan combined districts, 68, or more than 12 per cent., had to be classified as "bad."

The Water Supply of Dairies.—Four hundred and forty-five were supplied from the public mains. Ninety-two had not the public supply laid on. In all the latter class of dairies the premises were not situated within reach of the water pipes. The water supplies of three dairies were examined to ascertain their fitness for drinking purposes. One was found unfit.

Sewerage.—Wherever dairy premises are situated within a sewered district, proper connection with the sewers has been insisted on. There are no cesspits on dairy premises within the district.

Three cases of scarlet fever, two of diphtheria, and two of typhoid fever were notified on dairy premises during 1901. Twenty-nine cattle were condemned in the various dairy herds of the metropolitan area by the veterinary inspectors of the Department of Public Health. In 24 cows tuberculosis was the cause of condemnation, three of the cows were affected with actinomycosis, and two with cancer.

It has been stated that in the climate of Sydney it is impossible to supply milk without the aid of preservatives; but by the proper use of refrigeration and cold storage it is quite possible to deliver large quantities of milk to the houses of consumers without deterioration even in the hottest weather, if careful and cleanly

methods are employed, and I have been convinced by frequent examinations that at least one of the large milk distributing companies doing business in Sydney never uses chemical preservatives, relying entirely on pasteurisation and refrigeration of its milk.

There is an immense amount of adulteration practised on the milk supplies of Sydney. Not only are consumers cheated by the addition of water to their milk, but the use of chemical preservatives is very general among milk purveyors both in summer and winter. Local authorities are greatly to blame in this matter. It is clearly their duty to protect their constituents from the evils of adulterated food.

The extent to which adulteration of milk is practised generally may be gathered from the fact that of the 212 samples of milk taken and submitted to analysis, not less than 134, or 63 per cent., were on examination found to be adulterated. No samples of food other than milk were taken for analysis by local authorities in any district with the exception of the city of Sydney, where a few samples of coffee, baking powder, and beer were taken and analysed.

THE SANITARY WORK OF THE YEAR.—One hundred and one reports by the Assistant Medical Officer of Health (Dr. Stokes) or by me were forwarded to the local authorities of my district. They dealt with various matters, but few of them had more than a local importance.

Among the more important of the matters dealt with in the reports were the following:—The prevalence of typhoid fever at Balmain (two reports); a localised outbreak of typhoid fever in Parramatta; the condition of Clay Cliff Creek, Parramatta; a system of sewerage at Lady Robinson's Beach; the occurrence of a case of small-pox in Leichhardt; a steam disinfecting apparatus for Sydney.

The methods employed by the various local authorities for the disposal of garbage have, as usual, given rise to many complaints, and visits of inspection have been made from time to time either by the Assistant Medical Officer of Health or myself to the garbage depôts and refuse dumping grounds of the municipalities within the metropolitan area. Destruction by fire appears to offer the only reasonable hope of a satisfactory solution of the problem of refuse disposal in a great city. Petersham is the only metropolitan borough which at the present time is dealing with its refuse by fire, but the local authorities of the city of Sydney and of Annandale have taken the necessary steps for the erection of destructors. It is anticipated that these destructors will be in active work before the close of the year 1902.

A code of by-laws for the regulation of common lodging-houses, was adopted by the local authority of the city of Sydney in December of 1900. During 1901 its provisions were given full effect. The enforcement of these by-laws has had a very beneficial effect upon the condition of the class of houses with which they deal; many structural improvements have been made, and the mode of conducting registered houses has changed for the better.

During the year the local authority of the city of Sydney instituted the important work of the routine disinfection of dwellings from which a case of infectious disease had been notified. A sanitary inspector has been detailed for this duty, and he has under his orders two disinfecting labourers who carry out the details of the disinfection under his supervision. The agent employed is a 1 per cent. solution of formaldehyde, which is sprayed over walls, ceilings and floors, and the surfaces of all the contents of the room by means of an equifex hand-spray pump. The disinfection described is not confined to those dwellings only in which

notifiable infectious disease occurs; it is also offered to each house in which a death from phthisis has occurred. In nearly all cases the offer has been accepted. The total number of dwellings disinfected in the city of Sydney by the local authority during 1901 was 207: 87 premises were disinfected after scarlet fever, 28 after diphtheria, 41 after typhoid fever, and 51 after deaths from phthisis.

A practically new sanitary department was created in the city of Sydney; a staff of 15 sanitary inspectors was appointed under an amending clause of the City of Sydney Corporation Act; regular house-to-house inspection of the city was instituted, and the results recorded; action was taken to enforce proper drainage connection with the sewers, in respect of which the results of inspections proved over 50 per cent. of the dwellings within the city to be defective.

LECTURES TO SANITARY INSPECTORS.—During the year I delivered a course of 20 lectures on sanitation and sanitary law to the inspectors of my district. The lectures were well attended, the average attendance being about 30.

Extermination of Rats.—Amongst new by-laws of the Sydney Municipal Council is one to the following effect:—"The owner of any premises in the city of Sydney with which is connected any area grating of such a nature as to permit the entry of rats thereto shall, within 14 days after service upon him of a notice signed by the town clerk requiring him so to do, cause such area grating to be covered with wire netting of such a mesh and in such a manner as to prevent the entry of rats through such grating."

Sydney a Clean Port.—Sydney has been declared a clean port by the health authorities of Queensland and Western Australia, and berthing and fumigation certificates for vessels leaving Sydney for ports in these States are no longer required.

West Australia.

Leprosy.—A case of leprosy has been reported to the health authorities. The patient is a man 62 years of age who lived at Guildford, and is now isolated in the hospital there awaiting transfer to the lazarette at Woodman's Point. There is nothing to indicate that the disease has been contracted through contact with any alien people.

Queensland.

Suspicious Case of Cholera.—The steamer "Duke of Sutherland," from London, via Java, arrived at Thursday Island on Sept. 8th. She was reported to have a case of Asiatic cholera on board, and was temporarily quarantined. It was subsequently proved to be a case of dysentery.

Bubonic Plague.—After a cessation of 64 days from plague at Brisbane, a case was reported on August 4th. No further case reported. A case was reported at Townsville on August 20th; the patient died on the 21st instant. A case was reported from Gladstone on August 25th; the patient died on the 26th instant.

Total cases reported to August 26th	..	84
Total deaths reported to August 26th	..	28
Total discharged recovered	..	56

Rats.—Bacteriological examination of rats is being made daily, but only one plague infected rat was discovered during the above period of examination.

Tasmania.

At the last meeting of the Central Board of Health, Hobart, correspondence was read relative to the occurrence of a case of plague at Newcastle (New South Wales). The Secretary explained that he instructed all the port health officers in Tasmania that vessels from Newcastle were to be subjected to the medical inspection that was previously insisted upon with regard to vessels arriving from Sydney. The Chief Secretary stated that a quantity of Yersin's serum would be ordered in accordance with a resolution of the board. Eight cases of typhoid fever had been notified during the month of July. The number of scarlet fever cases notified was considerably over the average for the past nine years. Seventeen cases of diphtheria had been notified.

New Zealand.

Charitable Aid Department.—The annual report of the Hospital and Charitable Aid Department shows that the cost of administration for the past year was £88,848, an increase of £8975 over the previous year. The outdoor relief decreased by £3247. This decrease has been larger each year since the introduction of old-age pensions. The assistant inspector urges the establishment of a central receiving hospital for incurables.

Amendment of the Public Health Act.—An amendment of the Public Health Act is proposed by Sir J. G. Ward, making provision to enable all contacts to be vaccinated in the event of an outbreak of smallpox in the colony.

Bubonic Plague.—A wharf labourer at Lyttelton (N.Z.) has developed symptoms resembling plague.

Tabloids of Hydrarg. Perchlor. and Pot. Iodid.—We have received from Messrs. Burroughs, Wellcome & Co., a specimen of "Tabloid" Hydrarg. Perchlor., gr. $\frac{1}{8}$, et Potass. Iodid. gr. 5. Cases frequently occur in which the continued administration of mercury with iodide of potassium is essential. Mixtures, owing to their inconvenience and bulk, are unsuited in many instances, and patients neglect to take doses regularly. The compactness of the "Tabloid" products enables the treatment to be continued with regularity, and without being irksome to the patient. The dose of gr. $\frac{1}{8}$ of mercury perchloride is equivalent to one drachm of the Liquor Hydrargyri. Perchloridi.

Ophthalmic Tabloids.—We have received from Messrs. Burroughs, Wellcome & Co., a specimen of "Tabloid" Ophthalmic (T) Alum. gr. $\frac{1}{320}$ (0.0026 gm.), and a specimen tube of "Tabloid" Ophthalmic (X) Atrophine Sulphate, gr. $\frac{1}{320}$ (0.00018 gm.). Tabloid Ophthalmic products possess obvious advantages over old-fashioned methods of ophthalmic medication. They are designed to avoid the objections attendant upon the use of stock solutions, which are apt to decompose. Being immediately soluble upon the conjunctiva, and of high therapeutic efficiency, these Ophthalmic Tabloids will be found of great service to the physician.

Motors.—A motor quadricycle, fitted with genuine 2½ h.p. De Dion engine, in perfect order, just the thing for a medical man. To be sold at once. A great sacrifice. Innes & Mills, cycle and motor engineers, 84 Bathurst-street, Sydney.

MILITARY INTELLIGENCE.**NEW ZEALAND.**

- Blomfield, Dr. E. E., to be Surgeon-Captain to the Dunedin Engineer Volunteer Corps.
Perry, Walter Dymock, to be Surgeon-Captain Volunteer Medical Staff.
Howard, James, to be Surgeon-Captain Volunteer Medical Staff.
Blomfield, Edward Etheridge, to be Surgeon-Captain Volunteer Medical Staff.
Inglis, Tracy Russell, to be Surgeon-Captain, Volunteer Medical Staff.
Moore, William Walter, to be Surgeon-Captain, Volunteer Medical Staff.
Bernan, Henry Ferdinand, to be Surgeon-Captain, Volunteer Medical Staff.
Dalziel, James, to be Surgeon-Captain, Volunteer Medical Staff.

COMMONWEALTH.

- Lieutenant-Colonel Thomas Henry Fiaschi, D.S.O., to be Honorary Surgeon to his Excellency the Governor-General.
Strong, Robert Henry, M.B., Ch.B., to be Lieutenant Melbourne Cavalry, on probation.

NAVAL INTELLIGENCE.**NEW SOUTH WALES.**

The following temporary appointment has been made in the new Naval Brigade:—

Medical Officer: Staff-Surgeon G. L. O'Neill.

In addition to those whose names have already been published, the following officers retire:—Fleet-Surgeon S. T. Knaggs, Staff-Surgeons W. B. Violette and D. G. Hughes.

HOSPITAL INTELLIGENCE.

Sydney Hospital for Sick Children.—The new out-patients' department, situated at the corner of Quay-street and Valentine-lane, a small lane running west from George-street, is now in course of erection. It provides for a large waiting-hall to seat about 200 persons; for an examination-room at the entrance, with a small separate room for suspect cases; for four hon. doctors' consulting-rooms; also for house surgeons' and nurses' rooms, for an operating-room and resting-rooms, and for a large dispensary, with a waiting-hall to same, and for caretaker's residential quarters, and all necessary conveniences. The building will shortly be ready for occupation, when it is proposed to open it with a public ceremonial with a view to letting everyone see what has been done to provide for this branch of the institution.

Women's Hospital, Melbourne.—The forty-fifth annual meeting of the governors of and subscribers to this hospital was held at the Town Hall, Melbourne, on August 14th. There were nearly 400 people present, and at times matters were very lively; indeed, during the greater part of the time the meeting was decidedly uproarious. According to the report in the *Age* on August 15th, the doctors seem to have occupied a fair portion of the time, and to have taken advantage of their

opportunity to inform the committee that owing to their methods of management "the institution had gradually dwindled down from a first-class to a third-class institution." Judging by the subsequent proceedings the great majority of the subscribers seemed to be of the same opinion as the doctors. It is to be hoped that Dr. O'Sullivan's appeal to the subscribers "to rescue their institution from the peril it was placed in by mismanagement" will soon be rewarded by the hospital being under the control of a new and more up-to-date governing body. The Premier, Mr. Irvine, has declined to comply with the request of the committee of the Women's Hospital, that a County Court Judge be appointed to inquire into the charges made by the honorary medical staff against the committee at the recent annual meeting.

At the monthly meeting of the committee of the Queen Victoria Hospital, Melbourne, held on the 20th ult., Dr. Herman Lawrence was appointed honorary consulting dermatologist to that institution.

Infectious Diseases Hospital, Melbourne.—It has been estimated that the upkeep of this institution will cost about £4000 per annum. The metropolitan municipalities maintain that the Government is legally liable for half this amount, the other half to be provided by the municipalities themselves. In order to ascertain definitely whether the Government is prepared to accept the liability, a sub-committee will wait on the Minister of Health at an early date.

Geelong Hospital.—At a recent meeting of the hospital committee Miss Whittle, of Ballarat, was appointed a dispenser. The appointment was not made until after some discussion as to the wisdom of selecting a lady for the office.

Alfred Hospital, Melbourne.—Recently the Alfred Hospital managers adopted a new set of rules providing that the hon. medical staff be elected for a period of five years, instead of two years, as was formerly the case. The successors to Drs. Embling and Harricks, who have retired, will be elected for five years, and Drs. Jamieson, Maudsley and Schlesinger will be asked to retain office for another year. Lots were drawn as to whether Dr. O'Hara or Dr. Cook should retire from the surgery department, and Dr. Anderson or Dr. Backhouse from the physicians' department, resulting in Drs. Cook and Backhouse going out for re-election. A similar ballot, or drawing of lots, will take place next year in regard to the retirement of other officers. All the specialists whose term of office has expired, including the pathologist and anaesthetist, shall retire, and the reappointments be made for five years.

Wollongong Hospital, New South Wales.—A deputation, representing the committee of the Wollongong Hospital, waited upon the Premier to request that a sum of money should be placed upon the estimates to enable them to undertake the construction of a new hospital on an excellent site, recently purchased at a cost of £1200. The old building was estimated to be worth about £2000, and could be handed over to the Government. The Premier gave a sympathetic reply.

St. Vincent's Hospital, Sydney.—The Mayoress (Mrs. Hughes) and several members of the ladies' committee of the St. Vincent's Hospital Ball visited the institution for the purpose of handing over the net proceeds of the ball. The Mayoress, as president of the ball committee, handed the mother rectress a cheque for the sum of £301, being the net proceeds of the recent ball. The balance-sheet presented by the secretaries showed the total receipts amounting to £381 3s 6d and expenditure £80 3s 6d.

MEDICAL NOTES.

Micro-Organisms: their Life and Work.—At the Royal Society's House, Sydney, on August 30th, the third of a series of popular science lectures was delivered by Mr. R. Greig Smith, M.Sc., Macleay Bacteriologist, the subject being "Micro-Organisms: their Life and Work." The president of the society, Professor Warren, occupied the chair, and there was a large attendance. After pointing out the universal distribution of micro-organisms, the lecturer proceeded to show the structure, shape and method of growth, and the conditions governing the life and death of microbes, and it was pointed out how light, and especially sunlight, kills them. This was utilised in phototherapy, where a variety of tuberculosis of the skin was cured by condensing sunlight or electric light upon the affected places. With the assistance of a very complete set of lantern slides and diagrams Mr. Greig-Smith was enabled to illustrate and add to the usefulness of his remarks.

Leprosy in France.—The Academie de Medicine of France has been approached by the Minister of the Interior for its opinion as to the utility and advisability of a sanatorium for lepers. In France, the majority of the lepers have contracted their disease in the colonies and abroad. Missionaries, nurses, soldiers, sailors and colonial officials form the mass of the victims. The report of the Academie to the Minister is not enthusiastic on the question of sanatoria, and only advises their foundation under restrictions. The necessary surveillance of these institutions will require certain changes in the law, and without the surveillance laid down by the Academie there is reason to fear that the sanatoria might be productive of more harm than good. Hitherto the State has not interfered with the victims of this complaint; for more than a century they have been admitted, without precautions as to isolation, to the great Hospital St. Louis.

Death Rates.—There is a wide difference between the death rates of the dwellers in single rooms and the inhabitants of larger houses. Perhaps this fact was never shown in more striking fashion than in regard to the figures for Berlin during the period preceding the agitation which led to the reform of that city. Mr. Albert Shaw has summarised them in his valuable work, "Municipal Government in Continental Europe." "It was found that, although the one-room dwellers were only one-sixth as numerous as the three-room dwellers, their rate of mortality was about 23 times as high, and the actual number of deaths among them was four times as great. Compared with the dwellers in houses of more than four rooms, the mortality of the one-room dwellers was at a 30 times greater rate. In a total population at that time of 1,315,000, the 73,000 people who lived in one-room tenement quarters suffered nearly half the entire number of deaths. Their death rate per 1000 for the year was 163.5, or about one-sixth their entire number, while the two-room dwellers sustained a death rate of only 22.5, the three-room dwellers escaped with the marvellously low rate of 7.5, and the well-to-do people, who had four or more rooms for their household, suffered by death only at the rate of 5.4 per 1000 of population."

Miss WARD, late Matron of the Yass District Hospital, having opened a Private Hospital at Yass under the supervision of Drs. Thane and English, is prepared to take in a few cases of incipient Phthisis for treatment. Terms, from Two Guineas a week and upwards. Apply to Miss WARD, "Llawhaden," Private Hospital, Yass.

PERSONAL ITEMS.

Dr. J. S. C. Elkington, formerly acting health officer in Melbourne, has concluded a course of study in London, and received the diploma in public health. He is shortly proceeding to the Continent for a further term of research and study in Berlin, Paris and Vienna. A cable message recently stated that Dr. Elkington had been given a medical appointment in India.

Dr. Victor Black has removed from Katanning, and is now practising at Brisbane-street, Perth, W.A.

Dr. S. V. Duncan, late of Menzies, died at Kookynie, W.A., in July last.

Dr. G. H. S. Blackburne has just returned from a trip to England, and is now practising at St. George's Terrace, Perth, W.A.

Dr. C. E. Lawes, medical officer of the Great Cobar Copper Mine, has resigned his position, and succeeds to Dr. Bucknell's practice at Petersham, Sydney. A meeting to bid farewell to Dr. Lawes, ex-Mayor of Cobar, N.S.W., and Mrs. Lawes, was held on the eve of their departure for Sydney. They were presented with an address and piece of plate.

Dr. H. S. Capper has succeeded to Dr. Tilley's practice at North Sydney.

Mr. J. F. Barnard, M.B., B.S., has been appointed house surgeon of Launceston Hospital. Dr. Barnard was a pupil at Launceston Hospital, and after being senior resident surgeon at the Melbourne Hospital had six months' experience in South Africa as surgeon to the 1st Commonwealth Horse.

On the occasion of his marriage Dr. Ashburton Thompson, president of the Board of Health, Sydney, was presented by the professional, clerical, and general staff of the Public Health Department with a solid silver salver. Dr. Ashburton Thompson, in acknowledging the gift, said he was glad to be afforded the opportunity of recognising the friendly relations and cordial co-operation which, notwithstanding the occasionally distasteful exigencies of duty and the public interest, have hitherto invariably existed between them, and of expressing his confidence that they would continue.

Dr. Herbert Chesson has resigned his appointment as assistant medical superintendent of the Hospital for the Insane, Goodna, Queensland.

The resignation of Dr. Beattie Smith as medical superintendent of the Kew Lunatic Asylum has been accepted by the Executive Council.

Dr. Andrew Houison, the secretary of the Medical Board of New South Wales, has removed to 47 Phillip-street, Sydney.

Dr. Herbert Throsby, late of Maclean, Clarence River, has succeeded to the practice of Dr. A. E. Barcroft at Bowral, N.S.W.

Dr. Montgomery, superintendent of the Hospital for the Insane, Perth, W.A., is visiting the Eastern States inspecting asylums and the methods of conducting them, particularly in respect to the latest system of open-air treatment of patients.

Dr. Woinarski, formerly Government medical officer at Trangie, N.S.W., has left for Victoria.

Dr. R. N. Adams has commenced practice at Takaka, Nelson, N.Z.

Dr. Andrew Stenhouse has taken over the practice of the late Dr. Smith at Balclutha, Dunedin, N.Z.

The members of the medical profession in Wellington, N.Z., gave a dinner to Dr. Graham Campbell, of Christchurch, secretary of the New Zealand Branch of the British Medical Association, on his leaving for an extended tour of the old world. Dr. Collins occupied the chair.

Dr. Dawson, who recently returned from South Africa, has been presented by the non-commissioned officers and men of the seventh contingent (N.Z.) with a gold watch and an albert to mark their appreciation of his services to them during the war. Dr. Dawson has succeeded to the practice of the late Dr. Milne at Woodville, N.Z.

Dr. Lucas has left Takaka, N.Z., and gone into partnership with Drs. Hudson and Andrew, Nelson, N.Z.

Dr. R. Noble Adams, who has been acting as *locum tenens* for Dr. Deck, of Motueka, N.Z., during the latter's absence in South Africa, has taken over the practice at Takaka, N.Z., vacated by Dr. Lucas.

OUR ADVERTISING COLUMNS.—We have been requested to draw attention to the announcement of Messrs. Beard, Watson, Ltd., on page xxv.

The Equitable Life Assurance Society occupies a space in our advertising columns. This society claims to possess the largest surplus over liabilities of any life office in the world.

TO MEDICAL MEN.—Fine suite of rooms, first floor, to let, 261 Elizabeth-street, Hyde Park, Sydney. Apply E. K. Satchell.

MALE ATTENDANT for mental, inebriate, or general cases, seeks engagement. References and testimonials show 13 years' experience, including five years as attendant at Callan Park Hospital for Insane, three years as wardman in charge of Singleton Hospital. Address J. HILES, 161 Cecily Street, Leichhardt.

MEDICAL APPOINTMENTS.

VICTORIA.

Gillespie, Leslie Thompson, to be Public Vaccinator for the Northern District.
Jackson, Allan Godwin, to be Public Vaccinator for the South-Western District.
Mackenzie, John Hugh, M.R.C.S., to be Health Officer for the Shire of Melton, East Riding.
McGowan, Dr. A. G., to be Medical Officer of the Benevolent Asylum, Ballarat.
Morrison, Reginald Herbert, M.B., to be Public Vaccinator for the Victorian Infant Asylum in the Metropolitan District.
Owens, Edward Matthews, M.D., to be Health Officer for the Town of Caulfield, portion east of Kooyong-road.
Smith, William Beattie, F.R.C.S., Medical Superintendent of the Metropolitan Lunatic Asylum, Kew, to be Acting-Inspector of Lunatic Asylums during the absence of J. V. McCreery on sick leave.

SOUTH AUSTRALIA.

Dawkins, Dr. S. L., to be Officer of Health to the Local Board of Health for Mudla Wirra North.

WESTERN AUSTRALIA.

Blackburne, G. H. S., D.P.H., to be Medical Officer and Inspector for the Prevention of Tuberculosis at Perth.
Blackburne, G. H. S., D.P.H., to be Acting President of the Central Board of Health, Perth.
Deane, Dr. Edmund Clapperton, to be a Justice of the Peace for the Blackwood Magisterial District.
Elphick, Dr. Edward, to be Officer of Health for the Newcastle Local Board.
Hussey, Dr. Bertram, to be Acting District Medical Officer and Quarantine Officer for the Fremantle District; Acting Medical Officer, Old Men's Depot, Fremantle; and Medical Officer, Fremantle Prison.
Kelsall, Dr., to be Officer of Health, South Perth.
White, Dr. Arthur T., to be Public Vaccinator for the Registry Districts of Fremantle.

QUEENSLAND.

Gillies, Malcolm, M.B., M.S. Glasgow, to be Medical Officer at Bowen and Health Officer for the Port of Bowen.
Hewer, Henry John, M.B.C.S., to be Visiting Surgeon to the Gaol at Blackall.
Marr, Gordon William Singer, M.B. Syd., to be Assistant Medical Superintendent at the Hospital for the Insane, Goodna.
McLean, John Barr, M.B., B.S. Univ. Melb., to be Assistant Medical Superintendent at the Hospital for the Insane, Toowoomba, in the room of G. W. S. Marr, M.B. Syd., transferred.
McDonald, Fancourt James Edward, M.B., B.S. Melb., to be Acting Medical Officer at Brisbane, Acting Health Officer for the Port of Brisbane, and Acting Visiting Surgeon to the Prisons at Brisbane, to the Fortitude Valley Police Gaol, to the St. Helena Penal Establishment, to the Lock Hospital at Brisbane, and to the Dunwich Benevolent Asylum.
Row, Linford Elfe, L.R.C.P. and B. Edin., and M.D. Brux., to be Medical Superintendent at the Hospital for the Insane, Goodna, *vice* Herbert Chesson, M.R.C.S. Eng., resigned.

NEW ZEALAND.

Allen, S. C., M.B., B.Sc., to be Second Assistant at the Seaciff Lunatic Asylum.
Fleming, Dr. W. A., to be Public Vaccinator for Balclutha and District.
Valentine, Thomas Harcourt Ambrose, M.R.C.S. Eng., I. and D.P.H., R.C.P. Lond., to be Assistant Chief Health Officer.

NEW SOUTH WALES.

Halcumb, Charles Digby, M.B., to be Junior Medical Officer, Department of Lunacy, on probation for a period of 12 months.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

NEW SOUTH WALES.

Hodgson, Cortis Rawsthorne, M.R.C.S. Edin. 1897, L.R.C.P. Lond. 1897, M.B., B.S. 1897, M.D. 1899 Univ., Lond.
Paul, George William Frederick, M.R.C.S. Eng. 1885, L.R.C.P. Lond. 1886, M.D. Brux. 1886.
Russell, Matilda Hetty Grace, L.R.C.P. Edin. 1898, L.R.C.S. Edin. 1898, L.F.P.S. Glas. 1898.

VICTORIA.

Whyte, Angus, M.B. & Ch.B. Edin. 1899.

Additional Qualifications registered:—

Hiller, Konrad, Ch.B. Melb. 1902.
Horne, George, M.D. Melb. 1902.
Mackenzie, William Colin, Ch.B. Melb. 1902.
McNaughton, John, B.Sc. & D.P.H. 1899, F.R.C.S. 1900 Edin.
Perry, Charles, Ch.B. Melb. 1902.

Names of deceased Practitioners erased from Register:—

Boughton, Joseph Guest, L.R.C.S.
Vines, Edward Prince, L.R.C.S.

QUEENSLAND.

Crossfield, Hedley Robert Vicars, M.B., C.M. 1888 Glas.
Crowe, Henry Warren, M.B., B.S. 1902 Oxford, M.R.C.S. 1901, L.R.C.P.L. 1901.
Horton, William Henry, M.B. 1902 Sydney.
Page, Frederick William Tudor, M.R.C.S. Eng. 1897, L.R.C.P. Lon. 1897.
Stillwell, Effie, M.B., B.S. 1901 Melb.

SOUTH AUSTRALIA.

Macfarlane, Aylmer Alexander, L.S.A. 1892, L.M. 1893, L.R.C.P. and S. Edin. 1893, L.F.P. & S. Glasgow 1893, M.D. Brux. 1898.
Tarleton, John Wellington, M.B. Sydney 1902.

TASMANIA.

Deane, Charles Maslen, M.D. Edin. 1892, M.R.C.S. Eng. 1892.
MacDougall, Roland, L.K.Q.C.P. Irel. 1893, L.R.C.S. Irel. 1893.

BIRTHS, MARRIAGES AND DEATHS.

BIRTHS.

HAM.—On September 8th, at "Higholere," Clayfield, Brisbane, the wife of Dr. Burnett Ham, Health Commissioner, of a daughter.
KITCHEN.—On August 29th, at "Bycroft," Bank-street, South Melbourne, the wife of Dr. J. J. Kitchen—a son.

MARRIAGES.

ANGWIN—ANDERSON.—On August 5th, at Tottington, St. Arnaud, Victoria, by the father of the bridegroom, Stuart Letcher Angwin, M.A., M.B., Ch.B., third son of Rev. Thomas Angwin, Carlton, to Annie Bertha, third daughter of the late Andrew Anderson, of Tottington.
RIGBY—HALL.—On July 18th, at "Tynholm," Elgar-road, Surrey Hills, Melbourne, George Owen Rigby, M.B. Melb., F.R.C.S. Eng., second son of the late George Owen Rigby, M.D., to Loney, only daughter of Captain I. J. Hall.
SYMMEERS—MACREDIE.—August 2nd, at Kanool, Turramurra, New South Wales, by the Rev. John Ferguson, W. St. Clair Symmeers, M.B., C.M., of Cairo, Egypt, to Marnie Latimer Macredie, of Sydney.
THOMPSON—SIMPSON.—August 21st, at St. Mark's, Darling Point, Sydney, by the Rev. Willoughby Flower, M.A., J. Ashburton Thompson to Lilian Simpson.
THOMAS—YOUNGMAN.—On August 22nd, at the Methodist Parsonage, Warwick, by the father of the bride, Dr. F. M. Thomas, son of M. Thomas, Esq., of Sandringham, Victoria, to Jessa Evelyn, eldest daughter of Rev. Edward Youngman, of Warwick.

DEATHS.

BELL.—August 14th, 1902, at Haydonton, Murrurundi, Henry Rufus Bell, M.B., C.M.; aged 53 years.
SUTHERLAND.—On August 29th, at his father's residence, North-road, Brighton, Alexander Sutherland, M.B., of South Yan Yean, aged 44 years. (Interred in St. Kilda Cemetery, August 31st.)

BOOKS RECEIVED.

From BAILLIERE, TINDALL & COX, London.—L. BRUCK, Sydney.
Practitioners' Handbook of Diseases of the Ear and the Naso-Pharynx. By H. Macnaughton Jones, M.D., M.Ch., F.R.C.S.I. & Edin.; W. R. H. Stewart, F.R.C.S. Edin.; William Milligan, M.D., C.M.; H. Tilley, M.D., B.S., F.R.C.S. Eng.; A. Birmingham, M.D., F.R.C.S.I.; R. Dwyer Joyce, F.R.C.S.I., M.R.C.S. Sixth ed.

Clinical Lectures on Stricture of the Urethra and Enlargement of the Prostate. By P. J. Freyer, M.D., M.Ch. Second edition.

Clinical Lectures on Hydatid Disease of the Lungs. By Alfred A. Lendon, M.D. (1902.) Price, 5s net.

From FANNIN & Co., Dublin.

Transactions of the Royal Academy of Medicine in Ireland. Vol. xix (1901).

From JOHN WRIGHT & Co., Bristol (1902).

Protoplasm: Its Origin, Varieties, and Functions. By J. W. Hayward, M.D.

From YOUNG J. PENTLAND, Edinburgh.—ANGUS & ROBERTSON, Sydney.

Gibson and Russell's Physical Diagnosis. Third edition. Revised and rewritten by F. D. Boyd, C.M.G., M.D., F.R.C.P. Edin.

Text-Book of Anatomy. Edited by D. J. Cunningham, F.R.S., M.D., D.Sc., Prof. Anatomy and Surgery, Trinity Coll., Dublin. With 824 illustrations, many printed in colours. Price, 36s net.

From Messrs. W. B. SAUNDERS & Co., Philadelphia and London.—JAMES LITTLE, 480 Bourke-street, Melbourne.

Atlas and Epitome of Otolaryngology. By G. Brühl, M.D., and Prof. Dr. A. Politzer. Edited by S. MacCuen Smith, M.D. (1902). 15s.

Morphinism and Narcomanias from other Drugs: Their Etiology, Treatment, and Medicolegal Relations. By T. D. Crothers, M.D. (1902). 10s.

Atlas and Epitome of Operative Surgery. By Dr. Otto Zukerkandl. Edited by J. Chalmers Da Costa, M.D. (1902). 17s 6d.

American Year Book of Medicine and Surgery. Edited by G. M. Gould, M.D. Surgery (1902). Cloth, 12s 6d.

American Year Book of Medicine and Surgery. Edited by G. M. Gould, M.D. Medicine (1902). Cloth, 12s 6d.

A Practical Manual of Insanity for the Medical Student and General Practitioner. By Daniel E. Brower, M.D., LL.D., and Henry M. Bannister, M.D. (1902). 15s.

Diphtheria. By Wm. P. Northrup, M.D. Measles, Scarlatina, German Measles. By Theodor von Jürgensen, M.D. Edited, with additions, by Wm. P. Northrup, M.D. Authorised translation from the German, under the editorial supervision of Alfred Stengel, M.D. Price, 25s.

Diseases of the Nose, Pharynx, and Ear. By Henry Gadde, M.D., Prof. of Ophthalmology and Otolaryngology, University Medical School, Chicago. Price, 17s 6d.

HUDSON'S "EUMENTHOL" JUJUBES (Registered) are a Gum Jujube containing the active constituents of well-known Antiseptics, Eucalyptol, Thymus Vulg., Pinus Sylvestris, Mentha Arv., with Benzo-Borate of Sodium, etc., and exhibit the antiseptic properties in a fragrant and efficient form. Sold by all chemists; tins, 1s 6d. Are Antiseptic, Prophylactic, reduce Sensibility of Mucous Membrane.

Mr. W. A. Dixon, F.I.C., F.C.S., Public Analyst of Sydney, after making exhaustive tests, says:—"There is no doubt but that 'Eumenthol' Jujubes have a wonderful effect in the destruction of bacteria and preventing their growth. . . . I have made a comparative test of 'Eumenthol' Jujubes and Crescote, and find that there is little difference in their bactericidal action."

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Address: R. T. O'NEILL, 68 Crown Street, near William St. (Late 17 Leicester St., Sydney.)

AUSTRALASIAN MEDICAL GAZETTE.

THE
Majority of the Medical School
OF THE
University of Sydney.

**BEING AN ACCOUNT OF THE RISE AND
PROGRESS OF THE SCHOOL.**

	1883	1903
STUDENTS ..	4	204

By **T. P. Anderson Stuart, M.D., LL.D. (Edin.),**
Professor of Physiology and Dean of the Faculty
of Medicine, University of Sydney.

EARLY DAYS.

Palmar qui meruit ferat.

DR. H. G. DOUGLASS.

To find the origin of the Medical School we must go back to that of the University itself, for, as we shall see, the eventual establishment of a Faculty of Medicine was always contemplated by the founders of the University, and it appears to me impossible that Dr. Henry Grattan Douglass, whose share in founding the University we shall presently see, could have worked so faithfully for the establishment of the University without thinking of his own faculty, as something necessary to its full development and usefulness, and he is the first person of whom it is recorded that he took a step ultimately leading to the foundation of the University.

We learn in a letter, printed for private circulation, written by Mr. Francis Merewether, Chancellor of the University in 1865, that Dr. Douglass had been a resident and an official in the colony, and that he was a physician of long standing, who had practised his profession in France, in which country Mr. Merewether had known him. The Doctor had left the colony for a time, but returned in charge of an immigrant ship, and from that time, Mr. Merewether says, the foundation of an university became apparently the chief object of his thought, and he discoursed on it frequently and earnestly. He says: "Partly because of our former acquaintance, and partly, perhaps, because he found me more sympathetic than most of his hearers, I came in for much of this discourse. He knew that I was in the confidence of the Governor and the Colonial Secretary, and on one occasion he formally

asked me to endeavour so far to interest them in the project as to induce them to take action at once. I declined, because I knew well that, though they would both feel great interest in the object, they would, in that stage of the colony's existence, regard any movement in the matter as premature. But I added that if he was in earnest in his desire for immediate action, his best course would be to interest his friend Mr. Wentworth; and I ventured to add, that if Mr. Wentworth could be induced to take the matter up, and gain the necessary support of the Legislature, he would have the support of the Government. Mr. Wentworth did take the matter up warmly, and through his active exertions an Act to Incorporate and Endow the University of Sydney was passed."

The first Senate consisted of 16 Fellows, nominated by the Governor in 1850. A vacancy having occurred in 1853, Dr. Douglass was elected by the remaining members of the Senate. Why Dr. Douglass was not nominated to the original Senate I have not discovered, but when one reads the account of the quarrel between him and Marsden, as given in Rusden's History, and when one learns that the Governor had so much trouble in making up the list of the original Senate, that the passing of the Act of Incorporation was actually, on that account, delayed for a whole year, it is not difficult to imagine that there may have been political motives for the omission of his name; but it is significant that the newly appointed Senate should have taken the first opportunity of co-opting him.

He appears to have been a man of great activity of mind and body, and there were few things of public concern that happened under Governors Brisbane, Darling, and Gipps in which he had not a share. As a young man he was in charge of a regiment in the Peninsular War. Then he saw service in the West Indies until 1812, when he returned to his native Ireland. He now joined a band of philanthropists who sought to ameliorate the condition of prisoners, and it was this association which brought him to Sydney, where he probably thought he might find an ample field for his zeal and plans. It was he who introduced into the colony the law of limited liability in commercial partnerships, and that which abolished public executions, long before these measures were adopted in the old country. He took a prominent part in the organisation of most of the charitable and educational Institutions of the colony, and his last effort was a project for

taking better care of the blind. He was a member of that Building Committee of the Senate which settled the plans of the University and rejected the first design, which was for a brick building with stone facings; and in this connection it is interesting to record what is known to few that one of the two coats-of-arms carved on the south side of the Great Hall is that of Dr. Douglass (the usual Douglass arms, man's heart, etc., with motto "Forward"), and on a boss in the stringcourse over it, and on the end of the label mould, are carved his initials H.G.D. (The other coat-of-arms is that of Sir Stuart Alexander Donaldson.) His obituary notice in the *Sydney Morning Herald* says not a word as to his connection with the University; for that we had to wait 33 years, since Mr. Merewether wrote in 1898. This obituary notice concludes thus:—

To have lived a long and useful life, with no great faults; to have maintained the reputation of benevolence for half a century, by numberless acts of kindness, daily repeated; to have added something, by cheerfulness of temper, to the pleasures of society; to have enjoyed the confidence of some of the best beings who ever lived on earth, is to have given and enjoyed much compensation, whether for good or evil. This was, indeed, the lot of Dr. Douglass, whose cheerful voice and kindly humour and instructive conversation many among us will regret that they will hear no more.

Could that have been written of anything but an uncommon man?

My own attention was directed to Dr. Douglass' name (which is perpetuated by that of Douglass Park, where he resided) by a mere chance conversation with a lady who, in answer to my recent enquiries, writes: "My grievance, and that of Mr. Arthur a'Beckett, and also that of good old John Hubert Plunkett, was that Dr. Douglass was so utterly ignored in all record of the establishment, founding and inauguration of the University, and it was frequently said how much of the burden and heat of Wentworth's day of fame and work concerning the University was borne by Dr. Douglass. It seems to me appropriate that a word or two from one of your own profession should come from you." This word I have now spoken, and these circumstances, with other evidence, seem to show that Dr. Douglass had a great deal to do with the founding of the University and that it was he who moved Mr. Wentworth to effectual action.

WILLIAM CHARLES WENTWORTH.

What I have said about Dr. Douglass does not detract from the merit of Mr. Wentworth, who, beyond all question, was the man by whose eloquence the Legislature was moved. But how far public opinion was behind Mr. Wentworth, let him tell in his own words, when moving the second reading of the University

Bill. "It is not I, it is not you, who are the originators of this measure: it has origin without these walls—in the depth of public opinion—and we are only the active agents to give that opinion force and effect."

Three other members of the Profession of Medicine had to do with the actual founding and organisation of the new University. One is Sir Charles Nicholson, Bart.; the others were Professor John Smith and the first Registrar, Dr. Richard Greenup.

SIR CHARLES NICHOLSON, BART., M.D., LL.D., D.C.L.

Sir Charles Nicholson, now almost in his 96th year, arrived in Australia as far back as 1834, and, a Doctor of Medicine of my own university, the University of Edinburgh, he practised his profession in Sydney more or less continuously until 1862, when, having also successfully engaged in the pastoral industry, he returned to England. He was three times Speaker of New South Wales, and was the first Speaker of Queensland. He was not only a member of the original Senate, of which he is the only living member left, but he was also one of the Select Committee of the Legislature appointed to consider the best means of instituting a university, so that he has been connected with the institution from the very commencement of the enterprise.

In the absence of the Provost it fell to him, as Vice-Provost, to deliver the first "annual address" at the opening of the University, in what is now the Grammar School, in Hyde Park, and a great and eloquent speech it was. Soon after this Sir Charles became Provost in name, as he had been in fact, and the Amendment Act, which changed the title of Provost to that of Chancellor, having been passed in 1861, Sir Charles was the first to bear the title of Chancellor, as he had been the first officer of the University, because he as Vice-Provost had been elected to that office a fortnight earlier than the first Provost had been elected to his office. He was one of the committee by which the plan of the buildings was considered, and of the committee which selected the first books placed in the Library at a cost of £500. It was he who, by his own munificence, and that of friends moved by his exertions, secured the stained glass windows and the carvings in the Great Hall and the staircase, and his was the gift of the noble Collection of Antiquities which bears his name. During a visit to England in 1858 he succeeded in obtaining a Charter for the University from Queen Victoria. He presided as Provost at the opening of the Great Hall in July, 1859.

He appears, in fact, to have been everything and everywhere in the founding of the Institu-

tion, and we are not to suppose that it was all done without the usual difficulties. In his own words, before the 1859 Committee, to be afterwards referred to: "I can assure the Committee that, having taken no inconsiderable share in the initiation and subsequent management of the Institution, I have had practical and painful experience of the difficulties and disappointments attendant upon such a task." How very true all that is I can testify from experience in similar undertakings.

Though absent from the colony for 40 years, his interest in the University has continued unabated to this day, and our hearts went out to him when we learned, three years ago, that one winter's night, when the ground was deep in snow, the old man was aroused from his sleep by the cry of "Fire!" The house was quickly burnt to the ground, but Sir Charles has lived to build a new mansion, with the old name, on the old site. He has lived to see even the majority of the Medical School, which, as we shall see, he strove so hard to establish. Full of years and of honours, a Doctor of the Civil Law of Oxford, Doctor of Laws of Cambridge, and a Baronet of the United Kingdom, may he enjoy life to the end, in his own way, amid his books and his pictures!

PROFESSOR JOHN SMITH, M.D., LL.D.

Professor John Smith, a Doctor of Medicine of the University of Aberdeen, was the first Professor of Chemistry and Physics, and was one of the first group of three professors, the other two being Professors Woolley and Pell. He took a great part in the superintendence of the building operations of the University, and during the whole 33 years of his professorship he was a zealous, *but cautious*, promoter of public education, and of the public good.

DR. R. GREENUP, M.D.

Dr. Richard Greenup, M.D., the son of a surgeon, and whose wife was a niece of Sir Benjamin Brodie (the great surgeon whose picture is in the Sydney Jones window), was the first Registrar, and rendered valuable services in the administrative arrangements of the young University. On resigning his office, after two years only, he took charge of the lunatic asylum at Parramatta, where he was killed by one of the inmates in 1857.

THE MEDICAL PROFESSION AND THE FOUNDING OF THE UNIVERSITY.

The connection of the Profession of Medicine with the earliest days of the University is thus seen to have been most intimate indeed. As I have shown, Dr. Douglass moved Mr. Wentworth, who himself was the son of the surgeon at Norfolk Island, and was born there; Mr.

Wentworth moved the Legislature, and Dr. Nicholson moved heaven and earth, for, to quote from Mr. Barff's book, "while Wentworth is recognised as the University's founder, it was the untiring energy of Nicholson which placed it upon its firm base." Add now Dr. Smith, who superintended the building operations, and Dr. Greenup, who helped so much in the first administrative arrangements, and *all* the men most intimately associated with the founding of the University were also connected with the Profession of Medicine.

If one seeks to apportion the credit, my study of the circumstances leads me to the following conclusions:—Sir Charles Nicholson and Dr. Douglass were probably foremost in representing that public opinion to which Mr. Wentworth refers, but neither of these men appears very much on the surface: Nicholson because of his official position as Speaker, and Douglass because he appears to have been a man of strong individuality and, therefore, with a good many enemies as well as many friends, and somehow or other the inimical and official element seems to have predominated against him in his relation to the University. So soon as the Senate could bring him forward, they did so by electing him as a member of their body. When the Legislature had done its share of the work, and its chairman (the Speaker, Nicholson) was free to act, we see that he does act publicly, as he had probably been doing on the quiet all the time. Mr. Wentworth had apparently, quite independently, ideas of a University, yet he was not the active man who kept the ball rolling; he was the Legislator who intervened, as a Barrister might intervene in a case before a Court of Law, but that he did his portion of the work magnificently well we must all admit. It is really not very easy to differentiate the shares which these three men had in the founding of our University; Douglass appears to have been first in time, Nicholson in work, Wentworth in public advocacy. Let us not seek to separate them further, but be grateful for what they did together.

MEDICAL CHANCELLORS.

From the days of Sir Charles Nicholson no medical man occupied the position of Chancellor until 1896, when the present distinguished occupant of the office, the Honourable Sir Normand MacLaurin, was elected to the chair. Long may he live to fill it! So long will the University prosper.

THE SITE FOR THE NEW UNIVERSITY.

The first scheme for the establishment of the University came absolutely to grief. The Military Barracks were in the first half of the last century situated where Wynward-square

now, hence the name Barrack-street. The Government decided to remove them to Paddington, where they now are, and to sell the site of the old barracks. The proceeds of this sale Mr. Wentworth urged the Government to devote to the foundation of a university, but his efforts were unsuccessful and the scheme lapsed.

At a later date, after a passing occupation of what was the Sydney College and is now the Grammar School building, Barrack-square was considered as a site for the University buildings, but the Domain was preferred by Sir Charles Nicholson because of its proximity to the city. Grose Farm, where we now are, was accepted by the promoters as the only place they could get; but Nicholson wisely remarked, in 1859: "Admitting that it is now somewhat remote from the populous parts of the town, I think, looking to the future, the site is most admirably chosen." Have not his words come true?

THE FRIENDLY COMMITTEE OF 1849.

There was a great deal of public discussion, and even commotion, as to whether the University should be a teaching or merely an examining body in Arts, Law and Medicine, like the then newly established University of London; whether or not it should in any way be connected with religious teaching and examination; whether or not Clerics should be eligible for a seat on its governing body, or for appointment as Professors. But in the end the Legislature appointed a Select Committee in 1849, to consider and report on "The best means of instituting a University for the promotion of Literature and Science, to be endowed at the public expense." This committee recommended the institution of the University, and five Chairs to commence with. Of these one was "Anatomy, Physiology and Medicine."

THE HOSTILE '59 COMMITTEE.

"GRIFFINS, UNICORNS AND MONSTROUS SHAPES."

The Act of Incorporation received the Royal assent on October 1st, 1850, and we can but admire the greatness of the little band of gifted men, who had thus successfully struggled for the University, and who at that time were leading spirits of the colony, which numbered only 189,341 souls, scattered over an area eight times the size of the British Islands, and of which the capital city of Sydney contained (only 54,000 inhabitants) less by 10,000 than Newcastle does to-day!

The devotedness of the founders stands out in high relief when we read the Report and Evidence of the '59 Committee. This was a Select Committee of the Legislature, which sat in 1859-60, and which was appointed with hostile intent towards the young University.

It had no less than 26 sittings, and this alone shows how serious the position was. A member of the Committee was that vigorous, masterful man, the Rev. Dr. John Dunmore Lang, who had already publicly referred to the University as a "notable abortion"; and since the *animus* displayed by some members of the Committee against the University was so marked that Sir Charles Nicholson complained of it to the Committee's face, we need not be surprised by an adverse finding of the Committee. Adverse it truly was. It says—"That the University has not yet realised the expectations of the public seems clear, and it is also evident that great mistakes have been made with respect to it. A large amount of unnecessary expenditure has been incurred in an attempt to raise here, all at once, buildings not at present required, on a scale of magnitude which, in other parts of the world, has almost invariably been the growth of ages. Your Committee cannot recognise the correctness of the principle on which the Senate originally acted in projecting such a structure. If architectural display is calculated to cultivate and improve the youthful taste, the greatest care should be taken to exhibit it in its purest form. But amid diversities of taste, style, beautiful in the estimation of some, may be regarded as barbaric by others. And perhaps it may be well asked how the griffins, unicorns and other monstrous shapes, which have been selected as decorations for the University, can serve to develop a high type of architectural taste?" These words from the Report I read aloud yesterday to the said monstrous shapes. They received the words in silence, but not without manifest emotion: some smiled, some grinned, and some appeared to be trying to do something else. The Report goes on to condemn the Affiliated Colleges, and recommends their entire and immediate abolition, lock, stock, and barrel. Everything that had been done was attacked in spite of almost unanimous evidence to the contrary. The Report was based upon the prejudices of the members of the Committee rather than upon the evidence given before it. It is interesting reading that Report, read in the light of subsequent events. The Chairman spoke of the building being sufficient for "a couple of hundred years." It is so difficult to predict until the numbers are up!

Sir Charles Nicholson was asked if the University, owing to the small number of students in attendance, had not failed to realise expectations, and if it was not premature. He replied: "I think the reflection is upon the colony rather than upon the Institution. I think if you had waited longer you would have had greater difficulty in establishing it. I

think the colony would have sunk into a still greater degree of apathetic indifference and want of appreciation as to the advantages of such an institution."

The real answer to that Report is the "day we celebrate," but since, when the same architectural style was under consideration for the Medical School, I was met, after the lapse of a quarter of a century, with precisely the same sort of criticism, even yet occasionally heard, I might be permitted to refer to the matter somewhat fully, generally in the words of Sir Charles Nicholson, and specially in those of Sir William Windeyer, when they were being examined before the '59 Committee. Sir Charles said: "If you determine to erect a public edifice according to the style of any given epoch or country, you must carry out that style in all its appropriate details . . . although they may be regarded, in point of utility, as altogether supererogatory . . . unless you determine to erect something like a Quaker Meeting-house or a Factory, in which you discard all ornamentation whatever. But I do not apprehend such a design would have met the approval of the colony at large." Then specially when Mr. Black—ominous name—asked Sir William Windeyer, "Do you not think students might derive quite as much inspiration from the calm perusal of the works of men of genius as from the contemplation of those figures on the walls of the University?" Sir William Windeyer: "I think that the student would study with a great deal more enthusiasm, and more abstract attention or devotion to his studies, if surrounded by buildings of fine architectural appearance than he would if reading in a barn." The Chairman asked: "Do you think Homer was inspired by the buildings of Greece?" "No; but I think that the Greeks were in a great measure inspired with a love of their country from the love of the fine buildings around them. We read it in Thucydides. I am speaking of the most glorious period of Grecian history, when Pericles himself, pointing to those buildings, reminded them that their existence was one of the causes of the love of their country." By Dr. Lang: "There were no such buildings in Homer's time?" Windeyer: "No." The Chairman: "Then Homer's divine genius was not at all inspired by the buildings of Greece?" Now was Sir William's chance, and he took it. "Perhaps so; but the poetry of Homer may have inspired the Greeks to build those buildings!"

BEGINNINGS OF THE MEDICAL SCHOOL.

It is quite clear that, from the continual mention of teaching and degrees in Medicine,

a Medical School was in contemplation from the very beginning, and the Act of Incorporation and the Charter empowered the University to grant medical degrees. These degrees were granted by the Senate upon the report of a board of eight Examiners, one of the first members of which was Dr. Charles Nathan, father of Lady MacLaurin. The other seven members of the original Board were Dr. à Beckett, who had been staff-surgeon to the British Legion in Spain; Dr. George Bennett, our benefactor, the well-known author of "Gatherings of a Naturalist"; Dr. Greenup, of whom I have already spoken; Dr. James Macfarlane, to whom I shall again refer; Dr. James Robertson, Professor Smith, and Dr. George West. On the establishment of the present Medical School the granting of such degrees was discontinued.

In 1859 Sir Charles Nicholson says in his commemoration address: "It is also hoped—and measures are now indeed being actually taken to effect the object—that professorships in medical science may be speedily established, and that systematic instruction may be communicated in a manner and with a completeness essential to the proper training of those desirous of obtaining a degree in either of the Faculties of Law and Medicine."

DEAN—MALGRE LUI!

The Registrar gave evidence before the 1859 Committee that these steps had been taken, but Professor Smith complains to the Committee that the Senate in his absence, without his knowledge and against his will, had made him Dean of the Faculty of Medicine—the Senate apparently expecting that he would lend a hand in organising the School of Medicine, upon which it had set its heart. But in this they were woefully disappointed, for he joined the other two professors in a protest against the establishment of the school, and gave evidence before the committee, directly against the testimony of Sir Charles Nicholson, as representing the Senate, and of Dr. Macfarlane, as representing the Profession in Sydney.

Dr. Macfarlane, in his evidence before the Committee, said that the School of Medicine was "not only desirable but imperative," and said that this was the view of the profession in Sydney. It is, indeed, a glimpse of the dark ages of Medicine when, in the course of his evidence, he says: "I remember when I began the study of Medicine in 1828 I had to pay £20 for a body which had been underground for weeks." But all that has been changed by Anatomy Acts, a local Act having been introduced into the Colony by Dr. (now Sir Arthur) Renwick.

The Senate was so anxious to give effect to its views at this time that it instructed the architect to prepare plans for an Anatomical School, and appointed a committee to confer with the management of the Sydney Infirmary with regard to arrangements for clinical teaching.

The entire scheme, however, owing to the vigorous opposition of the Professors, fell through, but it was the cause of extremely strained relations between the Professors and the Senate, which formally "regrets that the Professors should have considered themselves justified in adopting so extreme a step as that of entering a protest against proceedings which the Senate, in the unquestionable exercise of its prerogative, had thought fit to take, with reference to the initiation of the necessary measures for the erection of a Medical School in connection with the University, as expressly contemplated by the 12th section of the Incorporation Act," and which declares that "it was unable to depart from its resolution to establish a medical school." The unwilling Dean thus remained head of a Faculty which had no body and even less tail right on to 1883, when the body came, the tail arose, and he was succeeded by myself.

OTHER SCHEMES.

In 1866 a further scheme was prepared to give instruction only in the first two years of the medical curriculum. This, too, came to nothing.

Between that time and 1873 various proposals kept the matter alive, and then the establishment of the Prince Alfred Hospital really brought the School into existence, for the first definite step towards the establishment of the school was the power given to the Directors in the Hospital's Act of Incorporation to provide for the School. It was, indeed, the inauguration of this School at the Hospital and in connection with the University which justified the University in giving a site, over 12 acres in area, to the Hospital, for the land had been granted to the University exclusively for educational purposes. The establishment of the School was, therefore, cardinal to the existence of the Hospital. In return for the site, the University stipulated for a share in the management of the Hospital and in the appointment of its medical officers. These negotiations took place in 1872, and in 1873 the acts were passed which gave legal effect to the bargain. By the Act an area of between two and three acres is reserved out of the site for the school building, and in early plans of the Hospital two different, but both most inadequate, plans of a school building are shown.

Fortunately these intentions never got any farther, for in 1876 the Chancellor, Sir Edward Deas Thomson, in his commemoration address, speaks as if it were now intended that the University, not the Hospital, should provide for the School; and in 1879 the new Chancellor, Sir William Montagu Manning, in his commemoration address, admits that the land would be more usefully applied for gardens or recreation grounds for the patients, and he states that the Senate was prepared to give it up and provide another site for the Medical School. And this is just what has happened—the Medical School is most conveniently placed near the rest of the University.

On July 3rd, 1878, Sir William Manning invited the Senate to consider whether there should be established at first a complete course, or a preliminary two year course only. The Senate, on the motion of the Hon. Sir Arthur Renwick, passed a unanimous resolution in favour of the complete course, and now, therefore, it was only a question of ways and means. In 1880 Mr. Challis died, and his great bequest was announced as a complete surprise to the authorities in Sydney. It was, however, to come in only after the death of the beneficiaries. By this time no less than five deputations had waited upon the Government to urge the necessity of increased support to the University; but, in view of the certainty of the bequest being available some day, the Government was again approached to secure the increased endowment, and now the establishment of a Medical School was spoken of as urgent owing to the approaching opening of the Prince Alfred Hospital. The opening of the Hospital actually did take place on September 25th, 1882.

AT LAST!

In 1882, rather unexpectedly at last, the increased endowment so long craved, so frequently asked for, was voted by the Legislature, and steps were immediately taken to make the necessary appointments.

I was appointed to the combined Chair of Anatomy and Physiology in '82, and it has always appeared to me an interesting circumstance that some little time before this I had been recommended for the task of organising a new school which a number of members of the Profession, who were in some way or other dissatisfied with the Owen's College Medical School, were proposing to start in Manchester. I visited that city and saw the promoters, but the scheme came to nothing. Nevertheless, I was to do this kind of work after all—in the Antipodes! In the beginning of '83 the work of the School began. We may thus fairly

assume that the School has now about reached its majority, and the coincidence of this period with the jubilee of the University seems to render the occasion appropriate for a brief review of our short life.

THE ORIGINAL SCHOOL BUILDING.

It had been intended that the new school should be located temporarily in a portion of the Exhibition Building in the Outer Domain, but that building was destroyed by fire. No steps were taken to provide accommodation for the Medical School until just before I landed, and I well remember the dismay with which, on my arrival, I saw the foundations of the modest, unpretentious four-roomed cottage out behind in the paddock, which I was told was, when finished, to comprise two rooms for the Medical School, and two for Professor Stephen and his Department of Biology. I first saw it in company with Dr. Badham, who informed me that the "stinks," meaning, I suppose, principally Chemistry, were all to go out at the back.

These branches of science were also dubbed "Brodstudien," "Bread Studies" by some, who sought to convey thereby that such subjects stood apart from and outside what was by them understood to be "Culture," and were not welcome at the University. When the battle had been fought *and won*, we can afford to look back with equanimity upon our struggles; but while struggling, as I well remember, we were anything but equanimous on either side.

The day has passed when it can seriously be contended that the universities ought to confine their attention to general mental culture. The universities grew out of the needs of the people, and were founded originally as technical schools—the oldest University of all, that of Salerno, was a school of medicine—and as they began, so they have continued to this day. Happily it is possible to train the mind by technical learning, as well as by learning for which there is no immediate use, and this is why a university can give a degree after a training solely in a professional school, for it is not *what* is known that makes a man cultured: it is *how he knows it*, the method by which he approaches knowledge, the attitude of his mind to it. Culture and knowledge, or rather, perhaps I should say, information, have no necessary relationship to each other.

Within some ten days after my arrival the walls of the cottage were up, though there was no roof, nor any windows nor doors, and in such curious surroundings, with the much-interested workmen lolling over the window-sills, wondering what it was all about, the

actual commencement of the School took place, on the day appointed in the Calendar, for it is a good thing to be up to time as well as up to date. Of this cottage, the original Medical School, no vestige remains to-day, all having been removed to make way for the department of Geology.

FORWARDS!

The first step in advance was to add three rooms behind this cottage, and the next was to absorb the two rooms which Professor Stephens occupied, he being also anxious to get away to less "fragrant" quarters. The first difficulty as to *personnel* was to find a man who would consent, for any reasonable wage, to come as Attendant; but soon there arrived Mr. John Shewen, who had served with me in Professor Rutherford's laboratory, and then my difficulties in this respect were at an end. By the same ship, but, as it happened, quite by chance, came Dr. A. MacCormick, as Demonstrator; he also had been with Professor Rutherford's department. From that day forward the teaching arrangements have never gone backward. Dr. MacCormick held office as Demonstrator until he was appointed lecturer in surgery. He was succeeded by Dr. A. E. Wright, now Professor of Pathology at Netley, and Dr. Wright by Dr. C. J. Martin, now Professor of Physiology in Melbourne. Professor Wilson arrived as Demonstrator of Anatomy in 1887, and in 1890 he became Professor of Anatomy.

THE MEDICAL SOCIETY.

It was while still here, in the old school, that we founded in 1885 the Medical Society, on the model of the Royal Medical Society of Edinburgh, of which I had been a president. The value of this Edinburgh Society is attested by many generations of Edinburgh students, and in spite of predictions to the contrary, the Sydney Society has flourished exceedingly—*semper sit in flore!*

* * * *

These events lead us up to the time when the new School Building was ready, and the School was, therefore, to leave its old home, the memory of which is still green with me, who spent there seven of the most strenuous years of my life, for I had to teach both Anatomy and Physiology, and at the same time carry on the work of organisation of the growing school, and superintend the planning and erection of this building.

UPWARDS!

Our passage from "Log Cabin to White House" was gradual, as portion after portion of White House was completed, but it was ir

and about 1890. As to the architectural style of this building, that of the already existing University building was fortunately followed, and for this we owe much to Mr. James Barnett, at that time Colonial Architect. As a young man Mr. Barnett worked at the building of the Great Hall, and it is to him that I am indebted for pointing out Dr. Douglass' coat of arms on the Great Hall.

As to the internal arrangements, I had already served a sort of apprenticeship, for it was while I was Assistant to Professor Rutherford that we "flitted" from the old Edinburgh University building in Nicholson-street to the new Medical School on the Meadows, and I had taken a good hand with the Professor in planning the fittings of our department in the new school. I may add that I was also at the

but the intention was to occupy these rooms only until they should be required for other purposes, when the University might be enabled in some way to build a separate and properly adapted Museum building in the space reserved for it, between the Medical School and the main University building. This period is undoubtedly within measurable distance, for, on the one hand, the collection very nearly fills the available space, and will one of these days overflow, and, on the other hand, the demands for increased accommodation can be satisfied only when the museum has found another home.

At first one often heard remarks as to the folly of building so great and costly a mansion, and Sir Arthur Renwick, who was Minister of Public Instruction at the time, informs me that



THE ORIGINAL MEDICAL SCHOOL, SYDNEY.

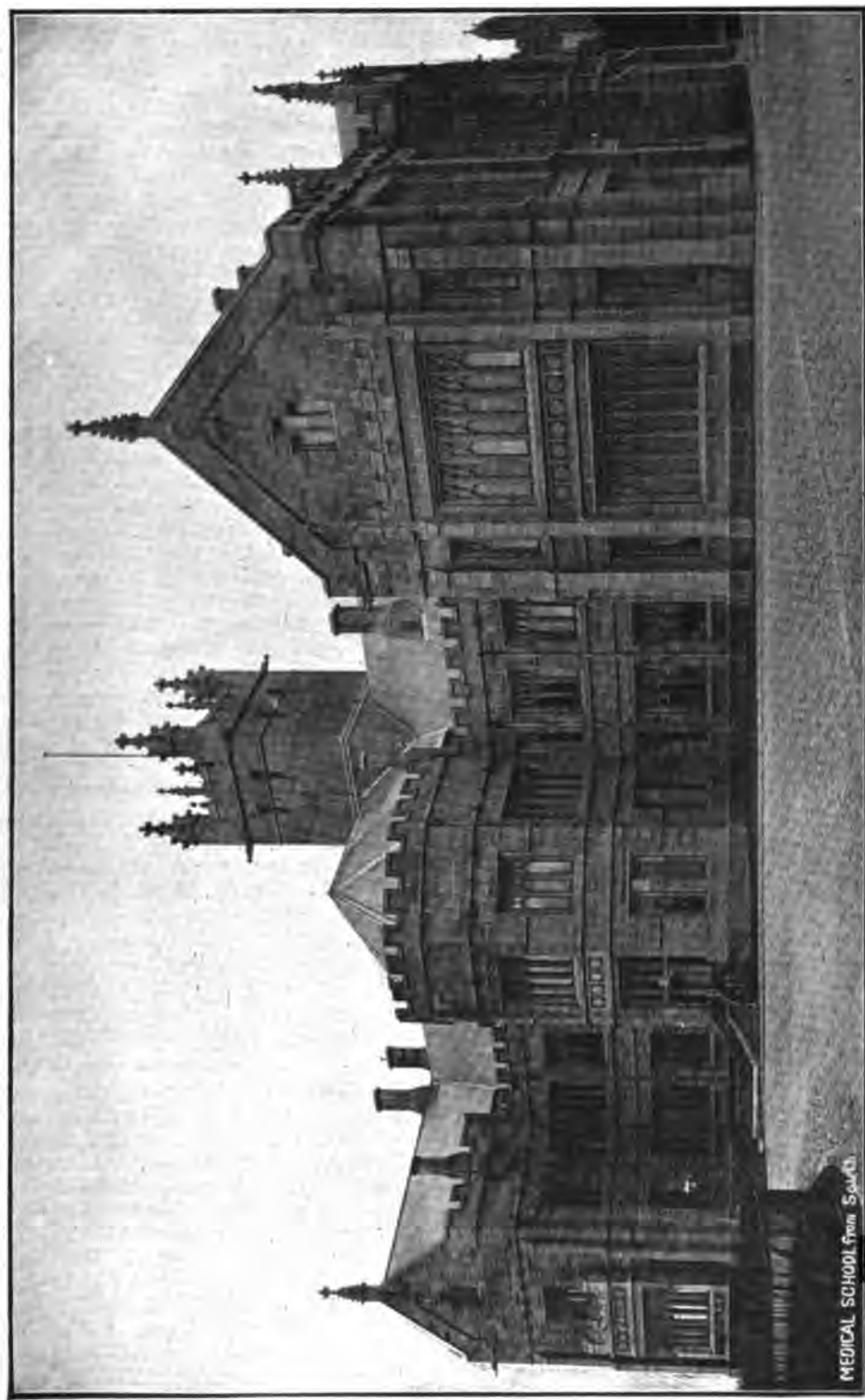
"flitting" from the old to the new Edinburgh Royal Infirmary.

—In regard to the size of the building, it was not the small number of students at that time in attendance for which we provided, but for our future greatness. Nor was it only the number of students we had to think of; we had also to consider the possible development of subjects of instruction. And has not the University's foresight already been amply justified?

The preliminary scientific subjects are each housed in its own building, so that this building accommodates only the purely medical subjects. The clinical subjects are provided for at the Prince Alfred Hospital.

The Museum of Anatomy now possesses 24,000 specimens, and is well worthy of a visit. It is housed in this building, several rooms having been thrown together for that purpose,

there was much opposition to the vote in Parliament, the first cost being about £80,000; but was it not a good investment for the State? Let us see what is the money value to the State of the Medical School. Suppose, for instance, that there were no Medical School here. The community would still need medical advisers, and it is fair to assume that at least one-half, say 100, of the students would go to Europe for their medical education. The average expenditure of each would not be less than £200 per annum, and the average time would not be less than six years, for the curriculum is five years, to which must be added the time of travelling to and fro, and the time inevitably lost in various ways. This would be in all at least £1200 per student, or at the rate of £20,000 a year, actually taken out of the State and spent elsewhere. This is now kept in the State, and, since what is paid in salaries is



THE PRESENT MEDICAL SCHOOL (LOOKING FROM THE SOUTH).

spent in the State, 25 per cent. is a fair return, is it not?

To this magnificent building as it stands we undoubtedly owe much of the success of the Medical School as an Institution. Student and graduate and teacher alike feel proud to belong to it, and its influence in creating an *esprit de corps* and good traditions cannot be over-estimated. The pride we all take in the Great Hall is paralleled by the pride which the medical takes in the Medical School building, and it all makes for good.

ON THE CONNECTION OF THE PRINCE ALFRED HOSPITAL WITH THE UNIVERSITY: ITS ADVANTAGES.

As we have seen, there have been three successive schemes for the permanent location of the Medical School. 1st. That it should be connected with the Sydney Hospital. 2nd. That it should be at the Prince Alfred Hospital, but connected with the University. 3rd. At the University, but connected with Prince Alfred Hospital and recognising certain other hospitals as places where study may be carried on. This last, the existing scheme, is undoubtedly far and away the best; so that if the Medical School *did* take so many years to incubate, when it *was* hatched it came forth under most favourable conditions.

This intimate connection of the Prince Alfred Hospital with the University is an advantage to both institutions. The University has a hospital convenient of access for the clinical instruction of students; the Hospital gains in various ways. For instance, we may fairly assume that upon the whole the best men of the Medical Profession will always desire to be connected with the University, and, therefore, also with the Hospital. Further, the senior students do a considerable amount of work in the Hospital, and in time the pick of the students when graduates become the Resident Medical Officers at a salary which is practically nominal, for the real remuneration is the experience they gain.

It is so arranged that each Resident in his 12 months' term of office takes charge in turn of the different departments of the Hospital. He is attached to the Hospital, and his experience is general and as complete as the time allows. He is not merely attached to the ward of some particular Physician or Surgeon by whom he has been selected and practically appointed, and whose practice alone he sees, as is so commonly the case elsewhere.

It is, indeed, simply astounding what the 12 months' service does for the Resident. His association with the visiting Medical Men, with his fellow Resident Medical Officers, with the Nurses, and with the Patients has brought him

experience beyond price, and has made a man of him. When he leaves he is—

A wise physician, skill'd our wounds to heal.

I find that out of the 218 graduates no less than 184 have held office as Resident Medical Officers, and this extraordinary proportion must have very largely contributed to that success of the graduates in practice to which I shall presently refer. When the extensions of the Hospital now in course of erection are completed, the number of beds will be raised from 236 to 456, and the number of Resident Officers required will be correspondingly increased.

Again, a body such as the Conjoint Board, composed of the University Senate and of the Hospital Board sitting together, should succeed in selecting the most competent Medical Officers to begin with, and then we may rely a good deal on the students for stimulating them to do their best. The students, who follow the work of the hospital Physicians and Surgeons in the wards or operation theatres, are valuable critics, and though their criticism is that of young men, nevertheless, in the multitude of them there is safety. As a matter of fact, it is admitted that the best and most intelligent work is, as a rule, done in Hospitals which are attached to Medical Schools, so that it is the patients who gain most by all these arrangements, the tendency of which is to secure and maintain efficiency on the part of the Medical Officers.

RECOGNISED HOSPITALS.

Certain other Hospitals have been recognised as places where study may be carried on, viz., Sydney Hospital, St. Vincent's Hospital, Benevolent Asylum, Women's Hospital, Hospital for Sick Children, Gladesville and Callan Park Hospitals for the Insane. At some of these places a considerable amount of work is done; and, doubtless, more will be done as the advantages of the University connection are more and more fully appreciated.

APPARATUS DOCENDI.

The two most important changes in the teaching arrangements since the School began have been the creation of two new Chairs—Anatomy and Pathology. Midwifery and Gynæcology have been separated as independent Lectureships, and five new Courses have been established, namely, Medical Ethics; Diseases of Children; Diseases of the Ear, Nose, and Throat; Diseases of the Skin; and Demonstrations on Psychological Medicine and Neurology. A new and important class, suitable for graduates and advanced students, is about to be established, namely, special Bacteriology. The special object of this class will be to enable the members to acquire a practical knowledge of

the chief method of dealing with microbes, for in a country like Australia each medical man must be far more independent than in more closely settled lands where specialists are always at hand.

I much wish to see established one other short course, viz., the History of Medicine. Of its value there can be no doubt whatever. As Dr. John Gregory said, 100 years ago: "It may reasonably be expected that every gentleman should be acquainted with the history of the science which he professes. The History of Medicine is not a subject of mere curiosity. To a Physician it is a useful and an interesting inquiry." In older countries one lives in the midst of associations and memories, and more or less grows up with a knowledge of them, but in new lands everything of that sort has to be acquired by an effort, mostly by reading. Fully alive to this, we were careful in designing this building to see that places for stained glass windows were provided, in which the pictures of great men of the past should appear; and by the generosity of Lady Renwick, of the late Dr. George Bennett, of Dr. Sydney Jones, and of Mr. John Harris, at that time Mayor of Sydney, these window spaces have, all but one, been appropriately filled.* Then again, the five theatres have been named after:—(1) Hunter, (2) Cullen, (3) Haller, (4) Harvey, (5) Vesalius. Lastly, reproductions of the busts of a great number of celebrated men adorn the walls. In this way we have striven to make the names more than mere shadows. All this, however, amounts to no more than mere dry bones of the History of Medicine. What we want is a short—there is no time for anything more—luminous account of how, as age succeeded age, the knowledge of the day gave place to that of the morrow, and how each advance rests on something that went before.

A department of Dentistry has quite recently been opened, and there are now 31 students in the first and second Years. The Dental School is already a pronounced success, and certain to be a great benefit to the community, which in the past has suffered much at many hands. In connection with this School the University has been compelled to establish a Public Dental Hospital, which is at once a Clinical School for the dental students and a boon to many poor people. It was originally intended and arranged that the clinical work should be in the dental department of the Sydney Hospital, but the Medical Staff of the Hospital pointed out that there was no room on the Hospital site for additional buildings, and the arrangement was abandoned in consequence.

* Sir Arthur Renwick, Mr. John Harris, the late Mr. John Struth and the late Mr. Henry Wait have given £1000 each to found Scholarships in the Faculty of Medicine.

Forty-four students attend in accordance with the regulations of the Board of Pharmacy, but the subject is in an unsatisfactory condition, owing to a defect in the Pharmacy Act.

Certain steps have been taken towards the establishment of a department of Veterinary Medicine and Surgery. In Germany and other countries, which are alive to their best interests, this is a University Department. If this University is to identify itself with the local needs of the people, and of that there is, in my opinion, no question but that it should do so, for it can raise and ennoble them all, what is more important in Australia than the intelligent care of its flocks and herds?

A CHAIR OF BOTANY WANTED.

A Chair of Botany would be a great acquisition to the University and to the community, for the present association of the subject with Zoology in one department is not satisfactory either to teacher or to taught. I find that as far back as 1859 Sir Charles Nicholson contemplated the establishment of a Botanic Garden at the University; but the Curator of the Botanical Gardens opposed this, saying that all the work of that kind could be done at the Gardens; and if it was so then, is it not more so now? The botanical resources of the State would abundantly repay a careful study, and the services of the Professor would, in this regard, be most valuable.

WANTED—A LIBRARY OF BOOKS ABOVE AND BEYOND ALL ELSE.

The one thing which, above and beyond all else, we need now is a well-stocked library of scientific medical books, especially serials. Complete sets of the latter are now very costly, and they become more so every day, owing to the general recognition of their necessity in the prosecution of original research. Cut off, as we are in Australia, from all converse with the older countries and centres of learning, our need is the greater; and if we are ever to take a position as centres of light and leading, this want must be supplied, cost what it may. In this connection I cannot do better than quote Sir Charles Nicholson's words in 1861 when presenting his Collection of Antiquities to the University: "In no invidious spirit would I allude to the many individuals now in Europe, and enjoying that affluence which has been the result of successful enterprise in these colonies. I would respectfully remind such persons that a graceful recognition of the claims of the land to which they have so long been attached by the ties of birth, by residence, or by honourable exertion, may in some degree be afforded by occasionally placing within the reach of those still residing in it objects of art and historical

monuments." And I would add, books or the money to buy them.

THE CURRICULUM.

As a new school, with our reputation to make, we have always had a high standard of excellence, and we have never given a degree without due attendance for the full period. There have already been three curricula, and a fourth is now under consideration. The continuous advance in knowledge, changes in the relative importance of subjects, and improvement in the quality of text-books, all render a revision of the curriculum necessary every few years. The general tendency of the change is to increase the amount of practical work in Laboratory and Hospital, and to reduce the number of lectures. At the same time the method of instruction by lecture must not be undervalued, for up to a certain point it is unsurpassed and unsurpassable. In suitable subjects lecturing stands out in great contrast to the deadness of the tutorial method. No, we Lecturers are not going to be wiped out just yet!

A DIPLOMA IN PUBLIC HEALTH.

We have not yet given a special qualification in public health for two reasons. In the first place, the demand has only lately arisen by the passing into law of the Public Health Act, which the Profession had advocated for many years, but which only became law when I as President of the Board of Health was able to induce the Government of the day to take the matter up with the determination to pass the Bill. The other reason is that the D.P.H. of Cambridge has been a convenient Qualification for our graduates to obtain while visiting Europe, and in this way 8 out of the 36 graduates who have visited Europe have obtained it. In so far as it has acted as an inducement to graduates to visit Europe it has been a good thing, because that visit in itself, not before graduation but after it, is of immense value, precisely as a visit to Australia is of use to the European graduate.

SOME STATISTICS.

The original number of four students has been increased every year, without exception, and in the current year stands at 204 in attendance. Altogether the names of 522 students have appeared upon the rolls. Of these 207 men and 11 women have graduated, while 100 have not graduated, although they have attended long enough to do so. Roughly, therefore, one in three has failed, from all causes, to complete the curriculum.

Of the 218 who have completed, 142 have done so in the shortest time, and 76 with delay, varying from one to six years.

Putting these figures in another way they show that of the 318 who have attended long enough to get a degree only 45 per cent., or less than one half, have graduated in the minimum time, a fact which indicates that candidates have not slipped through too easily.

With the kind assistance of two of our graduates, I have made an estimate as to how the graduates have fared since they took their degrees. Of the 218, 11 have died, and two have relinquished practice, so that there remain 205 at work to-day. In my estimate, those who have died, or who have given up, have been classed according to what they were apparently doing when their professional career closed. Such is the demand for their services that immediately upon their graduation the medical graduates can always earn a living; but those whose graduation has been too recent to enable one to judge what they are likely to do in after life are in number 54, and have been left unclassified, except where they have married, when they are classed as "doing well." Obviously, men of education do not usually marry unless they think they are doing well enough to support a wife and consequences. There thus remain 164 who have been classed.

I have in no case set down anything about income earned, because by itself income is no criterion of success. For instance, the successful teacher or official at the head of *his* branch of the profession may earn but a fraction of the income of the no more successful practitioner. I have, therefore, in every case considered the kind of career chosen and estimated the success in that line.

The number of failures is happily very small—hardly worth accounting for; and, after all, one must not expect too much from the Medical School, which can but deal with the material presenting itself. It can make men into Medicals, but not always Medicals into men.

Of the 164, 14 have been classed as doing "excellently well"; 68, "very well"; 52, "well"; and 27, "fair." Thus, 134 out of 164 are doing well, or better than well. I am fully aware of the limitations of my classification, but in the nature of the case it cannot be made exact, and I think that for all practical purposes it may be accepted. One knows quite well what is meant to be conveyed by the terms; "excellently well" implies conspicuous success, "very well" is just very well; what more is needed?

From all this it is evident that the high standard aimed at has borne good fruit, and it is not only the graduates themselves who have benefited. The public, too, have benefited directly by the competence of the medical advisers supplied to it, and indirectly by the inevitable tendency which the existence of such

a School has to raise the level of efficiency of the profession generally throughout the State. For this the University deserves well of the Profession of Medicine in the State, since while it is true that the public estimate of the Practitioner depends much upon that of his Profession, it is also true that the estimation in which the Profession is held depends much upon the character of the Practitioners; they act and react upon each other.

To gauge the extent to which Sydney graduates have permeated the Profession and influenced it numerically, I analysed the (last) "Register of Medical Practitioners, 1902," and I find that, of 798 practitioners *at work* in the State, only 133, or 16½ per cent., are Sydney graduates. It is, therefore, clear that there is still plenty of room within the profession for the expansion of the Sydney graduate. As a matter of fact our graduates are absorbed as quickly as they are produced, and there is a good reason for this. The losses to the Profession in New South Wales by death, departure and retirement amount to about 40 per annum, so that the number of the graduates is annually less than one-half of the waste of the Profession in New South Wales alone, and it must not be forgotten that 10 per cent. of the graduates belong to or reside in Queensland, and over 7 per cent. elsewhere.

POST GRADUATE STUDY.

Owing on the one hand to the tendency of monied families to leave the State, and, on the other, to the attractions of private practice in Australia, there has as yet been an almost total absence here of young medical graduates, who, as in Europe, are content to go on with their studies after graduation, staying about the School and the Hospital, occupying minor offices, and gradually winning their way forwards and upwards to fill the higher posts. As an undergraduate the man necessarily confines his attention to the common round which all must follow. As a graduate he may follow his bent, and so get the most and the best out of himself. It is to such men, now free from the worries of anticipated examinations, well informed in the lore of their profession, trained to work, and, therefore, most likely to work fruitfully, that we should look for original work or research in the medical sciences. As Foster points out, if post graduate work is simply to be learning after graduation what the man ought to have learnt before it, then it is merely making up for more or less wasted opportunities, and is hardly worth taking any trouble about; but real research work will certainly educate the man and benefit his patients, and it may perchance

advance the Healing Art. By and by when the calls of practice have to be attended to, or the daily grind of teaching and administration with its endless meetings, frequent disappointments, continual pinpricks, and quite unnecessary worries of every kind and degree has to be gone through, the chance of continuous work is sadly lessened, and even the capacity for intellectual work of any kind is altogether diminished. It is possible that when the four Macleay fellowships of £400 a year each become available, they may help in this direction, for Animal Physiology and Pathology, Anthropology and Organic Chemistry are among the specified subjects, and these are all subjects which might be worked at by the young medical graduate.

IN CONCLUSION.

I have now shown the successive stages by which the University and the Medical School advanced to their present position of prosperity. That we have a great future is inevitable; about that I have never doubted, even in the earliest days, when the Philistines were upon us. To have been intimately associated with the founding of such a School we take to be a great honour, and likely to be an abiding distinction, for of all the Arts and Sciences the Study of Medicine, of which this School is the handmaiden, dealing as it does with the preservation and restoration to health, the first and most indispensable condition of human activity and efficiency, and the source of life's enduring happiness and noblest joys, has always been regarded as of the highest importance to mankind, and so it is likely to be regarded in all the coming time.

The next Celebration in connection with the school will be its jubilee, in the year 1933. I trust that many of us will meet again to celebrate that event, and of those who do, the only thing quite certain is that they will be a great deal older, and the best thing I can wish for the Celebrants is that they may then have no need for the Profession of Medicine even if represented by graduates of the Medical School of the University of Sydney.

In the course of a discussion at a recent meeting of the Royal Society of Queensland, some reference was made to the scientific work done by the late Dr. Bancroft. Dr. John Thomson (president) said Dr. Bancroft was an original worker and thinker in the world of science. He was before the days of bacteriology. Among other subjects which he inquired into were diseases affecting plant life, such as sugarcane, wheat, and bananas. He (Dr. Thomson) did not think his work was sufficiently recognised, and it was only fair to place on record their appreciation of its scientific value. Though it was done before the bacteriological research of later days, it tended in the same direction, and it was all working up towards the discoveries which had since been made.

BACTERIOLOGY OF THE BLOOD.

By H. Skipton Stacy, M.D., Ch.M. (Syd.), late
Resident Pathologist Sydney Hospital.

It is quite a common idea that most cases of septicæmia following sepsis in any part of the body are due to the streptococcus, but I think most pathologists will agree with me that the staphylococcus is an organism much more commonly met with. If we are to treat a case of septicæmia with serum, it is just as well to know what organisms we are dealing with, for, naturally, we cannot expect anti-streptococcic serum to cope with the toxins of other organisms than the streptococcus.

The following table contains a list of the various cases I have examined whilst resident pathologist at Sydney Hospital, with a few clinical and post mortem notes.

One will be struck with the high percentage of cases in which organisms were present, but it must be remembered that many of the cases were selected because of their probable presence. In most of these cases the blood was examined during life. The method then adopted was to thoroughly sterilize the patient's arm on the front of the elbow with soft soap and spirit, turpentine, carbolic acid (about 1 in 30), and sterilized water (in that order); the whole process taking about ten minutes. A bandage was then applied tightly on the upper arm to distend the veins (only three or four turns being necessary). An exploring syringe, with a capacity of 3 cc., was then inserted into a vein immediately under the skin. The syringe having been filled and withdrawn, the bandage is loosened and collodion applied over the puncture. The blood is then expressed over a tube of sloped agar and into a tube of bouillon; after that, incubated. Frequently, if the organisms are not very numerous, the growth

will take several days to appear above the surface of the blood on the agar. The bouillon culture, if any growth is present at all, will become cloudy, and a loop or two taken from it, made into a film preparation, and stained in the usual way, will disclose the organism. Their presence in the agar culture may also be shown by passing the platinum loop down on to the lowest level of the agar, where it is obscured by the blood, and then making a film in the usual way. To recognise their presence early is often of the greatest importance in the diagnosis, hence the usefulness of the above remarks. A bouillon culture has another advantage over the agar, because in it streptococci grow in their true form, namely, in chains; whereas in a stained film from the agar culture they are frequently seen in group form as well as in chains. In some of the earlier cases only agar cultures were made, hence it was difficult to say whether the organism present was staphylococcus albus or streptococcus. On this account the query has been put in several places in the table. The agar culture, on the other hand, brings out the colour of the organism, *e.g.*, in the case of staphylococcus aureus; colour does not come out in bouillon. Neither does the staphylococcus assume its grape-like form so well in bouillon as in agar. Hence the wisdom of using both media.

The method adopted of procuring the blood after death was as follows:—The skin of the arm was seared by a hot piece of flat iron, then a cut made through it with a sterilized knife, and another cut through the vein with a second sterilized knife; as a rule three or four platinum loopfuls were used.

I trust the day is not far off when we shall have a reliable anti-staphylococcic serum; it is badly needed.

TABLE OF CASES.

Age.	Sex.	Nature of Case.	Organisms Present or Otherwise.				Remarks.
62	M.	Pneumonia. Lobular or early lobar of right lung. Left lung healthy	Pneumococci present	..	..	..	Blood not examined till after death. Patient had laryngitis and pharyngitis as well. Had chronic interstitial nephritis.
38	M.	Lobar pneumonia	No organisms	..	..	..	Blood not examined till after death.
49	F.	Double lobar pneumonia	No organisms	..	..	..	Blood examined 6 days before death.
			No organisms	..	..	..	About 24 hours before death. P.M. showed some chronic nephritis as well.
75	M.	Lobar pneumonia	No organisms	..	..	..	P.M. showed almost the whole of one lung to be involved, and double otitis media.
24	M.	Lobar pneumonia	No organisms	..	..	..	At the time of the blood examination was delirious and unconscious; thought to be dying, but he recovered.
46	M.	Lobar pneumonia	Pneumococci (luxuriant culture)	..	..	..	Blood not examined till 12 hours after death. Lower lobe of left lung consolidated, also had pericardial effusion in which pneumococci were found.

Age. Sex.	Nature of Case.	Organisms Present or Otherwise.	Remarks.
45 M.	Lobar pneumonia ..	Pneumococci present .. (only a few colonies.)	Blood examined 3 hours before death. Upper lobe of left lung in a state of grey hepatisation, also pneumococcal meningitis both cortical and basal; pericardium normal.
22 M.	Lobar pneumonia ..	Pneumococci present .. (only a few colonies.)	Blood examined 6 hours before death. P.M. showed grey hepatisation of the left upper lobe and of the right lower lobe. Pericardium and meninges healthy.
36 F.	Lobar pneumonia ..	Pneumococci present ..	Blood not examined till after death. Pneumococci found in the spleen. Pericardium and meninges healthy. Left lung in a state of grey hepatisation throughout. Right acutely congested.
50 M.	Broncho pneumonia (almost lobar in parts)	No organisms ..	Blood examined both before and after death.
33 M.	Lobar pneumonia ..	No organisms ..	Blood examined about 18 hours before death and again after death. Left lung in a condition of grey hepatisation almost throughout.
50 M.	Lobar pneumonia ..	Pneumococci present ..	Blood examined one hour before death. Left lung consolidated, also had pericardial effusion and peritonitis. In the exudate of both these pneumococci were found.
50 M.	Pneumococcal septicaemia ..	Pneumococci present ..	Blood not examined till after death. Lungs showed no definite consolidation. Had pus in the sphenoidal sinus; this contained pneumococci.
38 M.	Lobar pneumonia ..	No organisms ..	Patient recovered, though at the time of the blood examination was very bad.
10 M.	Lobar pneumonia ..	No organisms ..	Ill 6 days, very bad; had crisis 2 days later and recovered.
17 M.	Lobar pneumonia ..	No organisms ..	Recovered, though was rather bad.
32 M.	Nephritis .. (interstitial and catarrhal)	No organisms ..	P.M. showed slight hypostatic pneumonia.
13 M.	Acute infective periostitis ..	No organisms present .. Staphylococcus aureus found in small numbers	Humerus affected. 5 days later. Some redness and tenderness over cheek. The arm, into which incisions were made, is not draining well.
		Staphylococcus aureus .. (luxuriant culture)	Died 4 weeks later. Developed numerous abscesses throughout the body, in all of which was found a pure culture of staphylococcus aureus.
10 M.	Acute infective osteo-myelitis	Staphylococcus aureus present ..	Blood examined 4 days before death. The upper end of the tibia affected. Pure culture of staphylococcus aureus found in the pus. P.M. showed septic infarcts of the lung, all containing staphylococcus aureus. Blood examined after death again showed a pure culture of staphylococcus aureus.
14 M.	Acute infective osteo-myelitis	Staphylococcus aureus .. (luxuriant pure culture)	Blood examined about 14 hours before death. Pus from femur contained a pure culture of staphylococcus aureus
54 M.	Cellulitis of scalp and septicaemia	Staphylococcus albus? ..	Blood examined 10 hours before death. Cultures taken from blood after death revealed the same organism growing much more luxuriantly. Illness began with a scalp wound.
80 F.	Cellulitis of face and septicaemia	Staphylococcus aureus present ..	Blood examined 15 hours before death. Blood examined after death also contained staphylococcus aureus. The pustules on the face contained the same organisms.

Age.	Sex.	Nature of Case.	Organisms Present or Otherwise.			Remarks.	
65	M.	Cellulitis of arm and septicaemia	Streptococci present	..	..	Blood examined two days before death.	
21	F.	Cellulitis of lip and septicaemia	Staphylococcus aureus	..	..	Blood examined 54 hours before death. The pus from the lip also contained a pure culture of the same.	
45	M.	Carbuncle of neck and septicaemia	Staphylococcus aureus	..	..	Blood not examined till after death.	
32	M.	Cellulitis of arm, septicaemia and pyaemia	Staphylococcus aureus	..	..	Blood examined when patient had been ill about 3 weeks. Staphylococcus aureus found in the pus from the arm, in the sputum and in the blood.	
			Streptococci and staphylococcus albus	..	..	Blood examined after death, which was about 6 weeks after the first examination. P.M. disclosed pus in the antra of Highmore and a loculated empyema and pus in the kidney. The pus from the two former contained staphylococcus aureus and streptococcus. The kidney pus contained staphylococcus aureus alone.	
41	F.	Herpes zoster	..	..	No organisms present	..	Herpes of forehead with some redness of skin not unlike erysipelas. The blebs contain staphylococcus aureus.
25	F.	Malignant endocarditis	..	..	Staphylococcus albus	..	Blood examined about 10 days before death. Pulmonary valve alone affected. Staphylococci (in diplococcal form) found on the ulcerated surface.
17	F.	Pelvic peritonitis	..	..	No organisms	..	Blood examined several days before death. Pelvic abscess opened and drained several days previously.
13	M.	Diphtheria	..	..	No organisms	..	Blood examined about 1½ hours before death. Very severe case. Tonsils, fauces, and naso-pharynx all involved. Culture from throat swabbing revealed staphylococci as well as the Klebs-Loeffler bacillus.
56	M.	Cerebral abscess	..	..	No organisms	..	Blood examined several days before death. Had a sub-dural abscess, not large, the pus containing streptococci.
21	M.	Epidemic cerebro-spinal meningitis	..	..	No organisms	..	Ill 26 days. Died a few days later.
15	M.	Enteric fever	..	..	Typhoid bacilli	..	Blood taken 7 days before death; was very bad at the time. Death was due to septic peritonitis, following upon perforation of several typhoid ulcers. Also had double broncho pneumonia and double otitis media.
19	M.	Enteric fever	..	..	Typhoid bacilli	..	Ill 2 weeks. Very bad, but 22 days later was still alive and rather improved. Developed a blotchy red rash over the face and body (uncertain whether this is due to coincident attack of measles or to quinine).
31	F.	Septic endometritis.. Puerperal septicaemia	..	..	No organisms present	..	Blood examined 3 days before death and on the 5th day of the illness, the 8th day after confinement. P.M. showed marked septic endometritis with thrombosis of the vessels of the uterus. Blood showed a most intense anaemia (red cells numbering only 755,000 per cmm.), suggesting a septicæmic process at one time of the illness, although the blood examined again after death showed no organisms.

Age.	Sex.	Nature of Case.	Organisms Present or Otherwise.				Remarks.
18	F.	Septic endometritis	..	No organisms	..	..	Recovered. Blood examined 4 hours after a rigor, of which she had many.
36	F.	Puerperal septicaemia	..	Streptococci present	..	..	Died 2 days later. Curetted 2 weeks previous to blood examination for septic endometritis after miscarriage. Some swelling of the knee-joint, probably due to pus.
36	F.	Puerperal septicaemia	..	Staphylococcus albus	..	..	Blood examined several days before death. Had been ill several weeks. Blood showed a most intense anaemia.
29	F.	Puerperal septicaemia and pyaemia	..	Staphylococcus albus	..	..	Blood examined a few hours after death. P.M. showed abscesses in several of the joints, as well as pus in the iliac vein; the latter showed in film diplococci and streptococci. In culture on agar, staphylococcus albus.
17	M.	Lateral sinus pyaemia	..	No organisms	..	..	Blood examined about 9 days before death, and about a fortnight after the onset of the illness.
36	F.	Puerperal pyaemia	..	No organisms	..	..	Blood examined 3 days before death (about the 3rd week of the illness). Blood examined again after death showed no organisms. P.M. disclosed septic infarcts of the lungs and spleen, purulent peritonitis, and pus in the temporo-maxillary joint. The pus contained numerous bacilli, also some diplococci and streptococci; no cultures of the pus made.

SUMMARY.

I wish here to summarise the findings in the more important diseases.

PNEUMONIA.—Of 17 cases examined pneumococci were found in seven, and in three only of these before death. In the other four the blood was not examined during life; possibly, if it had been, the organisms would have been found. Of the three cases in which it was found during life, six hours was the longest period before death ensued. Its presence is thus inconsistent with very many hours of life. The blood was examined in several very bad cases which eventually recovered, no organisms being found, so that their presence or absence is of some prognostic value; but, all the same, a great many cases of pneumonia die without becoming septicæmic. In one fatal case recorded in the table pneumococci were present in the blood and in the pus of the sphenoidal sinus, but there was no evidence of pneumonia.

ACUTE INFECTIVE PERIOSTITIS AND OSTEO-MYELITIS.—In the three cases recorded, staphylococcus aureus was present in pure culture in the blood and in the pus of all the abscesses. In one case it was not present very early in the illness, but appeared later. This patient lived about five weeks; the other two died within a week.

CELLULITIS.—Of this, six cases were examined and organisms found in every case. In three,

the staphylococcus aureus; in one, streptococcus; in one, staphylococcus albus (? streptococcus; see introductory remarks); and in the other one, the staphylococcus aureus during life, but when examined after death streptococcus and staphylococcus albus. All were fatal, the staphylococcus aureus killing quite as rapidly as the streptococcus.

DIPHTHERIA.—In the fatal case examined there was a mixed infection of the throat, viz.:—Klebs-Loeffler and staphylococcus, but the blood was devoid of organisms.

EPIDEMIC CEREBRO-SPINAL MENINGITIS.—Only one case examined; no organisms were present.

ENTERIC FEVER.—Two cases examined and in both typhoid bacilli were present. In one case the patient died, seven days after they were found, of septic peritonitis following perforation. The other case (at time of writing, 22 days after) is still alive and thought to be recovering; so that their presence in the blood does not necessarily mean a fatal issue.

PUERPERAL SEPTICÆMIA.—Of the three cases recorded only one was purely septicæmic, the other two developing abscesses in other parts of the body, thus being pyæmic as well. In one the streptococcus was found. In the other two, staphylococcus albus (? streptococcus; see introductory notes). The patients lived on an average several weeks after becoming infected; they invariably became intensely anæmic.

PYÆMIA.—Two cases recorded, one following upon lateral sinus suppuration, and the other puerperal. The blood was sterile in each case; it must at one time earlier in the illness have contained organisms, as shown by the presence of abscesses scattered throughout the body.

PLAGUE.—No specific cases mentioned in the table, but a dozen or more patients were examined, plague bacilli being found in several; these (as is always the case) proved fatal. Many cases die, however, without becoming septicæmic.

ON THE VALUE OF AN EXAMINATION OF THE BLOOD AS AN AID TO DIAGNOSIS.

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M.R.C.P. (Lond.), M.R.C.S. (Eng.), Adelaide.

If it were more generally known that the estimation of the number of leucocytes in the circulating blood is a very simple process requiring but little experience and but five minutes for each observation, this little experiment would be made more frequently than it is to-day, for there are cases in which it is able to afford us valuable assistance in arriving at a diagnosis, and sometimes also a prognosis.

During the last few years our knowledge of the histology of the blood has been enormously advanced. But fascinating as is the study of the microscopic structure of the varieties of white blood cells, few men engaged in private practice have time to follow it. They are, therefore, inclined to look upon the whole science of hæmatology as a subject only for specialists working in clinical laboratories. This is a mistake. From a practical point of view one of the most valuable things that hæmatology has taught us is this: that in a healthy person the number of leucocytes in the circulating blood is nearly constant—about 7000 per cmm., rising slightly above that number during digestion, and falling again to the normal shortly after. Any considerable departure from this constant, whether it be an increase or a diminution in the number of the circulating leucocytes, indicates, therefore, a departure from health.

There are a great number of pathological conditions that are associated with an increase of the number of leucocytes in the blood. Cabot, in his book on the examination of the

blood, gives us quite a formidable list, which is reproduced below:—

1. Infectious diseases with comparatively slight local inflammatory processes:—

- (a) Asiatic cholera.
- (b) Relapsing fever.
- (c) Typhus fever (according to the majority of observers).
- (d) Scarlet fever.
- (e) Diphtheria and follicular tonsillitis.
- (f) Syphilis (secondary stage).
- (g) Erysipelas.
- (h) The bubonic plague.

2. Infectious diseases with more extensive local lesions:—

- (a) Pneumonia.
- (b) Small-pox (suppurative stage).
- (c) Malignant endocarditis, puerperal septicæmia, and all pyæmic and septicæmic conditions.
- (d) Actinomycosis.
- (e) Trichinosis.
- (f) Glanders.
- (g) Acute multiple neuritis and beri-beri.
- (h) Acute articular rheumatism.
- (i) Septic meningitis and cerebro-spinal meningitis.
- (j) Cholangitis, cholecystitis, and empyema of the gall bladder.
- (k) Acute pancreatitis.
- (l) Endometritis, cystitis (some acute cases).
- (m) Gonorrhœa.

3. Local inflammatory processes:—

- (a) Abscesses of all kinds and situations such as—
Felon.
Carbuncle, furunculosis.
Tonsillar and retropharyngeal abscess.
Appendicitis.
Pyonephrosis, perinephritic abscess, and pyelonephritis.
Osteomyelitis.
Psoas and hip abscess when not simply tubercular.
Abscesses of lung, liver, spleen, ovary, prostate.
Salpingitis and pelvic peritonitis.
- (b) Inflammations of the serous membranes, including—
Pericarditis, peritonitis, pleurisy, arthritis (serous or purulent, non-tubercular).
- (c) Gangrenous inflammations, as of the—
Appendix, lung, bowel, mouth (noma).
- (d) Many inflammatory skin diseases, such as—
Dermatitis, pemphigus, pellagra, herpes zoster, prurigo, some cases of universal eczema, etc.

It may not be important to remember this list, but it is important to know that *all suppurative conditions* give rise to leucocytosis. If a patient is the subject of an abscess, no matter where the abscess be situated, the number of leucocytes in his blood will be increased from the normal 7000 to from 16,000 to 50,000 per cmm. or more. Also, in some acute infectious diseases, more especially lobar pneumonia, there is an increase of the number of leucocytes in the blood.

On the other hand there are a certain few pathological conditions associated with a diminution in the number of leucocytes in the blood. These are:—

Typhoid fever.

Measles.

Miliary tuberculosis.

Malaria.

Influenza.

Pernicious and some other forms of anæmia.

The enumeration of leucocytes is a simple mechanical process, like testing a patient's serum for the Widal reaction, and, like the latter, it is of value only as an aid to diagnosis. Nothing can ever take the place of clinical diagnosis—and happily so. It is the most interesting part of our work. But it sometimes happens that when we have learned all that can be obtained by inspecting, palpating, percussing, and auscultating a patient that we may yet be unable to make a definite diagnosis. A certain case appears to be one of typhoid fever, but we are uncertain—it might be a case of pneumonia in its early stage. A patient suffers with appendicitis—we find it sometimes difficult to make up our minds whether or not pus has formed. In such cases we make a mental balance of the evidence, and every factor, clinical or experimental, is weighed; and sometimes a leucocyte count may turn the scale.

I could mention a number of cases in my experience where the leucocyte count was of value.

I was called to see a man a few days ago. He complained of headache and drowsiness. He had been ill five days. His temperature was 103. His respirations were hurried. His tongue was clean at the tip and sides, furred in the centre. The apex beat was normal in position, and the heart sounds were normal. An examination of the chest behind revealed slightly increased vocal fremitus on the left side, with slight impairment of resonance, and rather harsh breathing. The abdomen was tense and somewhat tender; there was gurgling in the right iliac fossa. No enlargement of the spleen was made out, but the colon was distended. There was abundant evidence of pulex on the chest, but some of the marks were more suggestive of a typhoid rash than of fleabites. The expectoration was frothy, but not rusty.

I could not be sure whether this was a case of typhoid or of a deep-seated localised or early pneumonia. The number of leucocytes per cmm. was 16,000. This was in favour of pneumonia and against typhoid fever. The blood was subsequently examined for the Widal reaction with negative result. The sputum was examined and found to contain pneumococci. Later the physical signs became more

distinct, and there remained no doubt that the patient had a small patch of pneumonia at the apex of the left lower lobe of the lung. Here, therefore, the leucocyte count gave early support to the diagnosis of pneumonia.

I have examined the blood in many cases of pneumonia, and, with very few exceptions, they have always shown pronounced leucocytosis. The exceptions are of particular interest; for it is stated that if in an undoubted case of pneumonia there be no leucocytosis one may conclude that the resisting power of the patient is extremely poor and that the prognosis is correspondingly bad. Thus, a young man was admitted into the Middlesex Hospital in February, 1901, with pneumonic consolidation of the left lower lobe. On the day of admission I found his leucocyte count 16,600, the next day it had fallen to 7,800, and two days after it was still lower, 6,800. The patient died on the following day. In another case that died the leucocyte count was 7,800. Thus absence of leucocytosis in a case of pneumonia indicates unusually low power of resistance and a probably fatal result.

Another case that illustrates the value of a leucocyte count came under my notice the other day. A girl of highly nervous temperament had appendectomy performed about nine months ago. A sinus remained. She was well for a time, but since two months she has complained of pain in her back and limbs. The pains were, however, ill-defined and never constantly localised; yet she had an evening rise of temperature for months. Repeated examination by myself and by other medical men failed to reveal the presence of a collection of pus, even though the patient was examined under an anæsthetic. One was tempted, and, I am afraid, not in vain, to regard the symptoms as neurotic. A leucocyte count was made on several occasions: it was always about 15,000. I doubt if hysteria can produce leucocytosis; the blood count suggested pus. A few days ago a deep-seated fluctuating swelling appeared in the back, and on operating an abscess was discovered deep down, in front of the transverse processes of the lumbar vertebrae, and possibly originating in a vertebral body. Here, therefore, the leucocyte count hinted "pus" long before there was any clinical evidence of it.

An examination of the blood is often of great value in cases of appendicitis. Dr. J. C. Da Costa, jun., has recently published the results of an examination of the blood in 118 cases of appendicitis treated by operation in the German Hospital, Philadelphia. He finds that in catarrhal and interstitial forms of appendicitis

there is no leucocytosis, though occasionally counts as high as 12,000 or 15,000 may be made. But in cases of abscess, gangrene, or general peritonitis, there is usually well-marked leucocytosis. The average count made in his cases of abscess was 17,450 per cmm. But under two conditions, although pus is present, there may be no leucocytosis—firstly, when the abscess is so shut off that no absorption can take place from it; secondly, when the patient is so greatly poisoned by septic absorption that reaction is prevented.

Out of Da Costa's 118 cases there were 12 deaths. Of these, but two failed to show leucocytosis. In one the count was 6000, in the other 11,200. Da Costa remarks that a leucocyte count between 10,000 and 15,000 or 17,000 cannot be depended upon for diagnosing the form of appendicitis, since they may be observed in catarrhal cases, but that counts of 20,000 or more almost invariably indicate the presence of pus, gangrene, or of general peritonitis.*

During the last few years I have made a great many leucocyte counts, and I am fully persuaded of its real value. The instrument I have been in the habit of using is that known as Thoma-Zeiss. It is easily worked, and the instructions how to use it are usually sold with the instrument. In counting leucocytes it is best to use a 0.5% solution of acetic acid as a diluting fluid. It renders the red corpuscles invisible and makes the nuclei of the white cells very prominent, so that they are easily recognised. It is unnecessary to add any dye to the diluting fluid. If the instructions are observed there is not the slightest difficulty in using this instrument.

The simple enumeration of the leucocytes in the blood teaches us a good deal, but much more can be learnt if we supplement this by an examination of a stained specimen.

And here I would like to call attention to two recent improvements in the method of preparing stained blood films. It requires, perhaps, a little experience and patience to make a perfect film by the usual method of placing a drop of blood between two coverslips and drawing the latter apart. An excellent film can easily be made by touching a drop of blood with an ordinary cigarette paper and making a long bold smear directly on to the glass slide.

Another very simple method is thus described by Coles, who introduced it: "Immediately the drop of blood appears on the spot punctured it is allowed to touch one end of the surface of

a slide held between the finger and thumb of the left hand. Another slide, held in the right hand, is used to spread this drop over the surface of the glass by passing it along the slide—holding the glass at an angle of 45 deg.—in a quick but steady movement from left to right. If the drop be large enough, and the glass slide perfectly true, a thin uniform layer of blood is thus spread over the lower slide."

These methods, besides being very simple, have the additional advantage that they yield a film of very much larger surface than is usually obtained when coverslips are used. Further, the glass slides are more easily cleaned.

The second improvement is of greater value than the first. It is the introduction of Jenner's stain. Hitherto fixing, staining and counter-staining blood have been three separate processes, some requiring much time. Jenner's stain has the following advantages. It is at the same time a fixing agent and a double-stain, and it is rapid. The stain is a chemical compound of eosin, with methylene blue dissolved in absolute alcohol. It stains all nuclei blue. It stains all granules, acid granules appearing red, basic blue and neutral granules a faint violet tint. It also stains any bacteria and parasites as malaria and filaria that may be present.

The technique is perfectly simple. A film is made by one of the methods above described. A good film will dry in air in two seconds. A few drops of the stain are dropped on to it, and allowed to remain in contact with the film from one to three minutes, but not longer. It is then immediately washed off with distilled water, dried and mounted in balsam. Instead of mounting in balsam, however, I prefer to place a drop of cedarwood oil immediately on the surface of the film, and examine with an oil immersion lens. In the latter case no cover-glass is used. If I find anything of interest in the specimen, I drain off the oil subsequently, and mount in xylol balsam in the usual way.

There are three points to be observed in using Jenner's stain. *Firstly*, the glass slides must be perfectly clean and neutral in reaction. *Secondly*, the specimen must not be stained longer than three minutes, or it will be spoiled. Sometimes the best result is obtained by staining only for one minute. *Thirdly*, the stain must be washed off with distilled water or rain water; tap water, being alkaline, destroys the effect of the dye.

If these points be carefully observed, a beautifully stained specimen can be obtained in

*American Journal of Medical Sciences, Nov., 1901; also Lancet, Jan. 4, 1902.

about five minutes. (The stain is sold by Messrs. R. Kanthack, 18 Berners-street, London; but I have also obtained very good results by using the tabloids of this stain sold by Messrs. Burroughs & Wellcome. Contrary to the report recently published in the *Lancet*, I find that these tabloids stain the eosinophil granules excellently.)

The advantage of an examination of a stained specimen is, of course, that one recognises the different varieties of cells and their relative proportion. Some diseases, such as the various forms of leucocythæmia, cannot be correctly diagnosed without an examination of a stained specimen of blood.

Leucocytes are of two kinds—granular and non-granular. The granular cells contain granules which may be either acid and stain with eosin, and are therefore called eosinophils, or they are basic and stain with methylene blue, and are therefore called basophils or mast cells. Or they stain a neutral tint when a mixture of eosin and methylene blue is used; they are therefore called neutrophils.

The non-granular cells are of two kinds—Firstly, cells with a large lightly staining nucleus and a small quantity of coarse darkly staining protoplasm. These are the lymphocytes. Secondly, cells with a relatively small dark staining nucleus and large lightly staining cell body. This is the large hyaline cell.

These five varieties—the eosinophil, the mast cell, and the neutrophil all containing granules, and the lymphocyte and large hyaline cell without granules—are found in the circulating blood. One further variety is also found—the transitional cell; it is identical with the large hyaline cell, except that it contains a few neutrophil granules.

These cells are found in normal blood in the following proportion:—

Neutrophils, also called polynuclear cells	70-72 %
Lymphocytes	22-25 %
Eosinophils	2-4 %
Transitional	2-4 %
Large hyaline	1 %
Mast cells	0.5 %

There is much evidence to show that all granular leucocytes are formed in bone marrow from pre-existing granular cells. These parent cells are, therefore, called myelocytes; they are usually large cells, but small ones also exist. They contain a large faintly-staining, single, round nucleus and granules. The parent cell of the eosinophil contains eosinophil granules; the parent cell of the neutrophil cell contains neutrophil granules. These myelocytes are not normally found in the blood stream. Although the majority of the granular cells are

formed from myelocytes in bone marrow, some are undoubtedly also formed by a process of mitosis from the daughter cells themselves in the circulating blood. Of the non-granular cells, the lymphocytes are formed in lymphatic glands and, possibly, also in the spleen; it is not certainly known where the large hyaline cell is formed, probably not in the spleen.

The granular leucocytes of the circulating blood, therefore, differ from the non-granular cells in their seat of origin; they differ also in function. The granular cells are amoebic and they react to chemiotactic stimuli. The non-granular cells do not react to chemiotactic stimuli. Certain substances, such as the metabolic products of bacteria, bacterio-proteins, albumoses, organic extracts, etc., are able by chemical stimulus to attract the granular cells that are stored up in bone marrow, so that these wander out from their homes and appear in increased numbers in the blood stream.

These chemiotactic stimuli do not react equally on each variety of granular cell. Thus, an agent that will attract a polynuclear neutrophil may at the same time repel an eosinophil, in which case the polynuclear cells will accumulate where the attracting agent is found, while the eosinophils will be present in diminished numbers.

Practically, however, in the great majority of cases in which there is an increase in the number of leucocytes in the blood it is the polynuclear cell, the cell with fine neutrophil granules, whose numbers are augmented. And when one uses the term leucocytosis one usually refers to an increase in the number of these polynuclear cells in the blood. Thus an abscess, or an acute infectious fever, or an osteomyelitis, gives rise to a leucocytosis.

Less is known of the conditions that lead to an increase in the blood of the eosinophils or of the mast cells. The number of eosinophils is largely increased in myelogenic leukaemia, also in asthma, in pemphigus, and many chronic skin affections. It is found associated with all varieties of the helminthides, including the oxyurias, the ankylostoma, the trichina, the bilharzia, the filaria and the echinococcus.

In trichinosis the percentage of eosinophils has been observed to be increased up to 68%. Seligmann has recently reported a case of hydatid of the liver in which there was pronounced eosinophilia. The number of leucocytes in the blood in his case was 17,000 per cmm., and these were present in the following proportion:—

Polynuclear cells	22 %
Eosinophils	57 %
Lymphocytes	20 %
Basophils	1 %

Some two months after operation the leucocyte count was 7600 per cmm., with the following percentages:—

Polynuclear cells	73.2 %
Lymphocytes	22.2 %
Basophils	1.4 %*

Opportunities for the study of the blood in hydatid disease are somewhat scanty in England, but they are abundant here in Australia. It would be wise for us to make a systematic examination of the blood in every case of suspected hydatid disease in order to ascertain in what measure the presence or absence of eosinophilia is of real diagnostic value in this disease.

An increase in the number of mast cells in the circulating blood is rarely observed, but it is sometimes seen in myelogenic leukæmia. A specimen of blood which I took from a patient with this disease shows this condition very well.

From what has been said, it will be seen that leucocytosis and an increase in the blood of any of the granular leucocytes is a function of bone marrow. The granular cells are formed and stored away in great numbers in the marrow, ready and waiting, as it were, for the signal of alarm which will call them to action.

But it is otherwise with the non-granular cells. Apart from actual disease of the lymphatic glands, as in the lymphatic form of leukæmia, an increase in the blood in the number of non-granular leucocytes is not found in many conditions. It exists to a slight extent during digestion, and a case has been recorded in which subcutaneous injections of pilocarpine led to a steady increasing number of the lymphocytes in the blood. I am able to confirm this statement. A case of diffuse alopecia, which has been treated by me for about two months with hypodermic injections of pilocarpine (gr. 1-6th twice a week), showed on examination of the leucocytes a very marked increase in the percentage of lymphocytes (45 per cent.) The following was the differential count:—

Polynuclear cells	52.3 %
Lymphocytes	45 %
Eosinophils	0.8 %
Transitional	1.8 %

Hence, anything that will tend to increase the flow of lymph through the lymphatic glands will also tend mechanically to carry more lymphocytes from the glands into the blood stream. Hence the explanation of an increase in the circulating lymphocytes during digestion, when, as the result of absorption, there is an active flow of lymph through the intestinal lymphatic glands. In the same way the hypodermic administration of pilocarpine

profoundly alters the flow of lymph in the body, with the result that a great number of lymphocytes are mechanically carried into the blood stream.

The purpose of this paper is to emphasise the fact that the examination of the blood is a simple process, and that it may sometimes yield valuable results. But the subject is yet young, and we require additions to our knowledge. I think that a systematic examination of the blood should be made of every patient admitted to the wards of a general hospital, and I believe that in private practice an occasional examination of the blood, in cases of doubt, will sometimes lend an important clue to diagnosis.

(Read before the South Australian Branch of the British Medical Association.)

INFLUENZA.

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THE epidemic of influenza in 1889-1890 has left upon some of us no vague impressions of its nature and intensity. Influenza is a disease that at long intervals of time has spread over the world. Its severity varies much, but it may strike as hard as typhoid fever, and leave its victim even a greater wreck. It is hard to conceive why influenza should have received so many nicknames, for such terms as "the new delight," "the gentle correction," "the jolly rant" hardly suggest the fiendish disease as some of us have known and suffered it. Influenza is something more than a haphazard term for a disease that is not worth the trouble of diagnosing. Medical men at any rate should use the term with a clear understanding of its meaning. The ravages of influenza in Europe, America, and Australia, especially in 1889-1890, exceeded the ravages of the plague of later times; yet, while a localised outbreak of plague scares a community and creates a veritable and costly panic, there is a curious flippancy and careless inaccuracy in thinking and talking of influenza. Nothing but flippancy and looseness of thought can conjure ordinary catarrhal attacks into influenza. There is more reason for confusing influenza with typhoid fever, especially that type of typhoid fever in which the onset is sudden. Headache, backache, aching pains, great prostration of strength, epistaxis, furred tongue, sometimes diarrhoea, sometimes obstinate constipation, are usual symptoms in either disease. In the early stages of typhoid fever Widal's test fails absolutely, the diazo reaction may be

present long before Widal's test, and no spots are present even if we wished to examine them for typhoid bacilli. In most cases of influenza there is inflammation of the upper part of the respiratory tract of the nose, the naso-pharynx and the bronchi causing more or less mucous or mucopurulent secretion, often in large, dense, greenish yellow masses, in which may be found great numbers of the tiny bacilli lying free between the cell elements of the secretion. Typhoid fever may certainly cause some bronchitis, and even laryngitis, but it rarely causes a secretion that suggests influenza. From the very beginning influenza localises itself in the nose and naso-pharynx or the bronchi, and may thence spread to adjacent and distant parts. In unusual forms the primary infection of the air passages may be overshadowed by symptoms of other and often distant parts. Still there is generally some inflammation of the air passages, and some secretion which holds the chief clue to a correct diagnosis. The secondary symptoms arise in more ways than one. Commonly they are the effects of the specific action of toxins absorbed by the vessels at the primary focus, and conveyed thence to various parts, particularly to the susceptible central nervous system. Again, there may be more or less continuous extension of the infection to adjacent structures. In this way the accessory sinuses of the nose, the cranial cavity, the middle ear, the mastoid process, and thence the meninges, especially in children, in whom the extension is much favoured by definite anatomical peculiarities, are invaded by the infective agent, while in the lungs themselves the infection may spread from the bronchi to the bronchioles and thence to the tissue proper of the lungs, and even to the pleura. The infection may likewise spread to the gastro-intestinal tract. In any and all of these conditions a secondary or mixed infection may further complicate the process. Lastly, actual metastasis of the bacilli may take place by the lymphatics or blood-vessels and cause general infection; an influenzal septicæmia with influenza bacilli in all organs, and even in the heart's blood. This is, nevertheless, extremely rare. Thus infection and intoxication play varying parts in this protean disease, and, accordingly, the clinical picture and symptoms of the disease vary within wide limits. Influenza in these manifold phases may simulate many diseases: typhoid fever, pneumonia, gastritis, enteritis, encephalitis, meningitis, myelitis. When there is no true epidemic, sporadic cases of influenza may be overlooked or misinterpreted. On the other hand, when an epidemic exists there is a facile tendency to call everything influenza. No other disease simulates so many

distinct diseases as influenza. It is, therefore, self-evident that in the diagnosis of influenza we often stand in need of a trustworthy scientific test. Blood tests fail us. There are no specific changes in the blood that we can recognise—no characteristic changes in the blood elements; and, in spite of old contentions to the contrary, influenza bacilli in the blood are infinitely rare curiosities. Experiments on animals do not help us. Nevertheless, in very many cases, if one is but ready for the opportunity, examination of the nasal or bronchial secretion may at once solve the difficulty. Smear preparations may mislead all but the best experts; but the test by means of pure cultures on blood agar is of the greatest possible value. This is the simplest, most certain, and often the most delicate test of the real nature of influenza in the very early stages. Even ten years ago severe epidemic catarrh and epidemic influenza could hardly be distinguished in the first stages. Nowadays we can not only distinguish influenza but we recognise several forms of epidemic catarrh associated with special bacteria. This catarrhal inflammation of the respiratory tract may be due to the influenza bacillus, to a streptococcus, to Fraenkel's pneumococcus, to Friedlander's bacillus, and to a special coccus, the diplococcus catarrhalis.

Since 1892, through the careful and laborious investigations of Pfeiffer, influenza has once and for all been relegated to a group of acute specific diseases with a definite and known cause. The clinical picture is modified by the conditions of the tissue to which the bacillus finds access in accordance with the rule that applies to all such infections, but the influenza bacillus has the same relation to the disease associated with it as the tubercle bacillus, the plague bacillus, the diphtheria bacillus, and other pathogenetic bacilli have to their respective diseases. There can be no true influenza without the specific bacillus, though there may be many conditions that somewhat resemble influenza in its ordinary symptoms. Now, inasmuch as identical symptoms may be the result of a variety of causes, it needs a very clever physician to attain to a sound diagnosis without searching for the cause. Methods of investigation are not to be ignored or belittled because they savour of science and have their birth in the scientific laboratory. The handling of a cover-glass, and the inspection of a specimen with the microscope, may tell us more than the palpation and inspection of the chest. I am not aware that the physician who uses the microscope, or makes his diagnosis in the laboratory by those methods that science had provided for us, is any the less careful in physical examination, less accurate in diagnosis.

or less successful in treatment. A scrupulous search after all tangible evidences of truth must win against slipshod guesses at truth. Scientific ways should at least help us all to be accurate. The complacent self-sufficiency that revels in the very doubtful "certainties" that may be achieved in diagnosis by a complex, and often fantastic method of reasoning, unchecked or uncontrolled by the evidence of the chief witness who waits in vain to be called, may place the patient's life in jeopardy, and hardly benefits medical science. Every new aid to diagnosis deserves to be exploited in the interests of the patient and in the interests of medicine. Within very recent years the etiological factor has come to stay as an indispensable test in the diagnosis of many diseases. In plague, diphtheria, typhoid fever (Widal's test), tuberculosis, malaria, cerebro-spinal meningitis (lumbar puncture), and the various acute and mixed infections of the air passages and other parts, we are continually having recourse to methods of investigation based on the etiological factor. In this way an early diagnosis is often possible when early diagnosis is of supreme moment.

Those remarkable vagaries of influenza which tempted the scholastic philosophers of the middle ages to nickname this disease with such strange levity have been studied and explained by the serious science of our own times. Of special interest are some experiments upon animals that explain the prominence of symptoms of the nervous system. A. Cantani, junr., has demonstrated that the bacillus of influenza through its toxin has a specific affinity for the elements of the nervous system. While by the ordinary methods of inoculation—subcutaneous, intra-peritoneal, intravenous—infection of animals fails, rabbits can be infected by intracranial injection. Like the toxins of tetanus the toxins of influenza are appropriated and fixed by the cells and elements of the nervous system, perhaps according to Ehrlich's brilliant theory. Yet not merely intoxication, but acute infection, also occurs, because the influenza bacilli multiply in the cerebro-spinal system, and may be found throughout the cerebro-spinal canal. The bacilli may spread by the lymphatics and the central canal of the cord, even as far as the cauda equina. Thus the same morbid picture that has been found in man in cases of influenzal encephalitis and myelitis, without or with meningitis, may be produced in rabbits by intracranial injections, even of small amounts (less than 1 mg.) of a pure culture of virulent influenza bacilli. It has happened more than once that cases diagnosed as cerebro-spinal meningitis at the bedside have proved to be influenzal at the

post-mortem examination. We have, therefore, to learn that if lumbar puncture is practised for diagnostic purposes the fluid that yields no growth on ordinary media may yield influenza bacilli on a suitable medium. Even if diplococci are present they may exist in company with influenza bacilli. I had the good fortune to discover and demonstrate one of the few cases of pure influenzal meningitis that has been recorded. I made a post-mortem on a child and found the ordinary appearance of a meningitis. Some of the seropurulent exudation, removed with proper precautions, was smeared on ordinary agar, and, to my surprise, no growth occurred. As I happened at that time to be studying by bacteriological methods some cases of influenza complicating pulmonary tuberculosis during the epidemic of that time, it occurred to me that this might be a case of influenzal meningitis. I smeared the agar plate with some sterile blood, and after 24 hours' incubation the surface was studded with enormous numbers of the fine transparent colonies of the influenza bacillus. I do not think that more than four cases of pure influenzal meningitis have been recorded. Probably more cases would be discovered during influenza epidemics if the practice was adopted of using a medium suitable for the growth of the influenza bacillus. In dealing with the fluid obtained by lumbar puncture it is equally important to use such a medium, otherwise one may certainly remain sceptical as to the true etiological factor associated with the cerebro-spinal meningitis. Epidemic cerebro-spinal meningitis may be influenzal in name and in fact.

Influenza may cause true encephalitis (Nauwerck) and acute myelitis, even of a hæmorrhagic type. More often, however, there is meningitis similar to that caused by Fraenkel's coccus, the meningococcus intracellularis or Jacque's coccus. Such a condition is associated with the actual presence of influenza bacilli in the tissues. There is an acute influenzal infection which may cause apoplectic symptoms, convulsions, coma, delirium, monoplegia, hemiplegia, choreatic movements, paraplegia. But the nervous system is also profoundly affected by the toxins derived from distant parts: the initial headache, the severe pains, the neuralgia, the severe prostration of strength, insomnia, vertigo, profound mental disturbances, delirium, hallucinations, melancholia or mental weakness, loss of memory, depressions short of actual melancholia, are effects of this nature. Of similar origin are sequelæ in the form of neuritis, polyneuritis, and even Landry's paralysis without obvious lesions in the peripheral nerves, with normal myotatic irrit-

ability and no loss or change of electrical reaction. Further evidence of depressed vitality as the result of intoxication may be found in the persistent subnormal temperature and the intermittent, irregular or slow pulse, gastric insufficiency or catarrh, and slow convalescence. This depressed vitality of tissue favours other inflammatory processes. Inflammations are very common complications of influenza; cellular pneumonia, pleurisy, otitis media acuta (often of the hæmorrhagic type), suppuration of the accessory sinuses of the nose, cellulitis of the neck and elsewhere, suppuration of glands, myocarditis, pericarditis, endocarditis, sometimes arising months after recovery from the acute attack. Surely then a disease that may present such an array of symptoms, and may be followed by such serious and fatal complications and sequelæ, deserves no nicknames, and must be strictly recognised as a disease *sui generis*. Because it may run an atypical course and produce paradoxical signs its diagnosis only needs all the more care and discrimination. To call even the severe catarrhal colds that occur at certain seasons of the year by the name of influenza, just because the name appeals to the lay mind, is playing with the serious art of medicine and burlesquing diagnosis. If we know no better we should strive to learn. If we know better, we are indulging in a mild form of charlatanism. Neither ignorance nor charlatanism will find favour with the serious minded. I admit that this abuse of language is no worse than the plausible assertions of the medical man who, with a transcendent insight into the mysteries of nature, tells his patient that he has just escaped an attack of typhoid fever, of rheumatic fever, or some other tomfoolery. The scientific instinct can hardly acquiesce in this outrageous romancing. Influenza is a disease *sui generis*, and causes quite enough troubles of its own without any extraneous additions to the list of diseases and sicknesses that it does not cause.

Influenza is sometimes the euphonious name given to pulmonary tuberculosis in its early stages. It may happen that influenza lights up the latent spark of tuberculosis in the lungs. Influenza may complicate pulmonary tuberculosis as a concurrent affection of the bronchial tubes, causing much or little expectoration, in which there are enormous numbers of influenza bacilli, and may be no tubercle bacilli. In the latter case an accurate diagnosis is hardly possible without the use of a diagnostic injection of tuberculin. This is equally true of certain pneumococcal infections attacking a tuberculous lung. Influenza bacilli and Fraenkel's pneumococci produce parallel conditions of mixed infections in pulmonary

tuberculosis, which can only be distinguished by means of pure cultures. Various cocci, including the diplococcus catarrhalis, common agents of a secondary infection, may also cause symptoms simulating influenza, likewise complicating pulmonary tuberculosis.

These organisms may be associated with each other in a mixed infection. On the other hand influenza may complicate pulmonary tuberculosis in any stage as a secondary or mixed infection when its presence is little suspected. In all but the very early stages of pulmonary tuberculosis influenza is often a very serious complication, which may persist for many months, modifying the clinical picture, and profoundly modifying the prognosis of the tuberculous process. Diagnosis, prognosis and even treatment demand the use of bacteriological methods. Influenza may be the chief secondary infection, it does not as a rule occur by itself as a complication of pulmonary tuberculosis. It may also occur in a latent form, not even affecting the temperature, though as a rule the general health suffers through the toxic action of the bacillus upon the various tissues of the body. But the influenza bacillus also has varying local effects upon the lung tissues. Besides causing concurrent infection of the bronchial tubes it may lead to capillary bronchitis and bronchopneumonia, especially of the characteristic cellular type. It favours rapid extension of the tuberculous process in the form of extensive caseation of the tuberculous areas, or in chronic cases may lead to induration. While cellular pneumonia is the common type, consisting of a catarrhal suppuration affecting small areas, there may also in rare cases be true pneumonic consolidation affecting large areas. But croupous pneumonia is an accidental and unusual complication of influenza, and, therefore, if during an epidemic true pneumonia occurs frequently one may almost *a priori* assume that influenza has nothing to do with the epidemic. Thus, about a year ago, both in hospital and general practice, there was a severe epidemic of croupous pneumonia, as part of a general epidemic affecting the respiratory tract, many men in practice spoke of influenza. I did not see a single case of influenza in the hospital, and I failed to find influenza bacilli in any of the many cases I examined. I found, however, Fraenkel's pneumococcus, and especially streptococci. Further, the absence of any influenzal complications in the cases of pulmonary tuberculosis under my treatment strengthened me in the opinion that there was no true influenza in epidemic form. We had a very definite epidemic of influenza towards the end of 1899 and in 1900, when I isolated the influenza bacillus in many cases.

This year I have been on the watch for influenza, both in my hospital and private cases, because a few months ago there was a mild epidemic in Europe, and at last I have met again the tiny invisible fiend. Medical men may, therefore, take warning that influenza may cross their path in practice. It is a fact of some interest that the bacillus has been brought to us from the outside, the patient harbouring the parasite having arrived from South Africa in the troopship "Montrose." Let us hope that the outbreak may be sporadic, though I have also had two or three other cases strongly suggestive of influenza. In three cases there was a sudden attack with severe headache and backache, great weakness, a temperature of 103-104° for three or four days; but in every case, though there was expectoration at the outset, no expectoration occurred after the cases came under my observation. In two cases there was vomiting and shivering at the onset. In neither of these cases was there herpes. It is quite likely that these two cases were of the gastro-intestinal type. One cannot lay too much emphasis on the importance of examining the sputum in such cases for influenza bacilli. Every case of influenza needs to be treated as a serious disease, because, although the attack itself may not attract much notice, complications and untoward sequelæ may arise if the true nature of the attack be not understood.

Having discovered the influenza bacilli in the soldier who returned from fighting in one of England's greatest wars, I felt it to be my duty to communicate the fact to Colonel Williams. As I said to him, "a serious outbreak of influenza on a troopship might disorganise the best organisation, and cause a high rate of mortality without any blame attaching to those who were in authority."

I now proceed to deal with the preparations before us in order to show how readily and certainly the diagnosis may be made by simple bacteriological methods. In the diagnosis of influenza it is merely necessary to smear some of the sputum freshly collected in a clean vessel upon the surface of blood agar. The blood agar can be prepared in many ways. A consideration of the biology of the bacillus would lead us too far. The effect of staphylococci and their products, not more than 24 hours, have a remarkable effect in stimulating the growth of influenza bacilli on blood agar. Those interested in this phase of the question will find a full account of the various observations in an interesting article by Ghon and Preyss in the *Centralblatt für Bacteriologie* of July 26th, 1902. It is to Ghon working with Weichselbaum we owe that extremely

valuable method of testing and isolating plague bacilli—the cutaneous method of smearing suspected or contaminated material on the freshly-shaven surface of the guinea pig's abdomen, a method transcending all other methods of inoculation in connection with plague bacilli.

(Read before the New South Wales Branch of the British Medical Association.)

REMOVAL OF A RENAL TUMOUR.

By Jos. C. Verco, M.D. (Lond.), F.R.C.S. (Eng.), Adelaide.

C. S., aged 21, female, had consulted a medical man for amenorrhœa of two years duration. Under treatment the menses reappeared at the end of December, 1901, and again in February, 1902. I saw her first at the middle of March. She had been very pale, but with iron and arsenic prescribed by her previous doctor she became quite rosy. A large abdominal tumour had also been noticed in the splenic region, so that a diagnosis of splenic leukaemia had been made. When first seen by me she was plump and quite florid. There was no affection of heart or lungs. The urine had a specific gravity of 1010, and gave a cloud of albumen, and six weeks afterwards a good deal of mucus, and a questionable trace of albumen. In the left side of the abdomen was a tumour as large as a child's head at term, occupying the lumbar region. It could be easily pushed upwards so that its upper half lay under the ribs, and it filled the loin. It could also be moved downwards so as to allow the fingers to be insinuated between it and the costal arch, and to bring it into contact below with the pubic bone. It was round, and smooth, and solid, and free from tenderness. It had no sharp inner margin, nor could any notch be felt there. No thrill on percussion could be elicited, and no bruit was audible. On rolling it forward and inward there seemed to be a slightly projecting piece behind, separated by an obscure sulcus from the main mass. This I concluded to be the kidney from which the tumour sprang. On drawing the growth down, and getting a bimanual examination of the space above, a body could be felt to descend on deep inspiration from below the ribs, which was diagnosed as a normal spleen. The patient said she had noticed some enlargement for as long as two years, and that it had not altered much, if at all, during that time. But during the two months she was under my observation it seemed to grow, so that she had more difficulty in stooping, and it became slightly tender, and

she had some increased frequency of micturition, with slight urethral scalding and vulvar smarting.

Her blood, examined by Dr. Sydney Verco, showed 6,700,000 and 6,300,000 red corpuscles with no increase of white elements, nor was there any relative superabundance of the large or small mononuclear leucocytes compared with the polynuclear.

The diagnosis was not quite absolute. Her medical attendant thought she was suffering from leucocythæmia owing to her profound anæmia, and the tumour, which simulated an enlarged spleen. But an examination of the blood showed no relative increase of white corpuscles, nor any alteration in the comparative number of uninucleated and polynucleated corpuscles such as indicates leukæmia, apart from absolute increase of leucocytes. It might have been a splenic anæmia, but I decided against the splenic nature of the mass, although it looked very like a spleen; for it was globular rather than flattened, it had no sharp inner edge, nor any distinct notch; it could be pushed downwards so that the fingers could be got between it and the costal arch, and here on deep inspiration what appeared to be a spleen could be felt. In the descent of the mass it moved nearly vertically instead of swinging downward and inward, as a spleen usually does.

It seemed most likely to be a renal tumour, from its presentation in the anterior lumbar region, its ready impulse from the loin, the ability to insinuate the hand between it and the costal arch, and from the more solid projection at its back part, which seemed (as it proved to be) the kidney from which the growth sprang. My original diagnosis was a renal tumour. Its regular smooth contour suggested a hydatid, though the absence of thrill and the sensation conveyed of soft elastic solidity were negative. One character which made the diagnosis of a renal tumour doubtful was its marked mobility. It could be moved freely upwards and downwards and inwards, whereas "fixation is said to be a characteristic of renal growths. They impart to the feel a peculiar sense of resistance when attempts are made to move them in any direction. There are, however, exceptions to this rule."—(Greig Smith, "Abdominal Surgery," 1896. p. 867.)

The alternative diagnosis was a tumour of the omentum, possibly a thick-walled hydatid cyst or a soft growth.

Ether was given by Dr. Sydney Verco, and Drs. C. Magarey and W. A. Verco assisted me. The abdomen was opened by a vertical incision just inside the linea semilunaris over the equator of the tumour. This had the descending

colon on its inner side, and in front of its lower part. It had grown between the folds of the meso-colon, and pushed the bowel inwards. When its peritoneal covering was incised and peeled off it had a glistening white appearance like that of a hydatid cyst, but it yielded only blood to a needle and syringe. The abdominal incision was enlarged upwards and downwards, and the peritoneum divided upwards and outwards, was separated easily from the growth. When the inner border of it was reached it could be rotated outwards, so as to be partly delivered through the wound and dealt with visibly. At its posterior and upper part it was attached to the kidney, which was shelled out of its peri-renal fat until the whole mass was outside the abdomen. The vessels at the hilus were displayed. The ureter divided between clips. The pedicle of the kidney transfixed, and tied in two interlocked loops. The kidney was cut away, and the vessels picked up separately and tied again with fine ligatures on the face of the stump. The peritoneal capsule was sutured with silk, and the abdominal incision closed in layers. The ureter had been simply tied with silk and left in situ.

The tumour weighed nearly 5 lb. It was almost globular, very soft, quite smooth, with a thin white capsule, and sprang from the front and lower end of the kidney. The upper two-thirds of the organ seemed quite healthy; the lower third merged gradually into the tumour. On cutting it open it proved to be a very vascular soft brain-like solid growth, a tongue of which projected into the pelvis of the kidney.

She took her ether very well, and suffered very little shock, so that when seen about four hours afterwards she was quite comfortable but for some pain in the region of the incision. About seven hours after the conclusion of the operation she passed 7 oz. of very blood-stained urine, acid 1028, containing $2\frac{1}{2}$ per cent. of albumen, estimated by Esbach's albuminometer. Under the microscope it showed no casts, but red cells, and many cells of about three times the diameter of a red cell, with a pale clear protoplasm, and a large central body made up of small round bodies of a reddish brown tint, suggesting some resemblance to an amoeba, supposed to be malignant cells from the portion of growth projecting into the renal pelvis. A couple of hours afterwards she passed urine quite free from blood, acid sp. gr. 1018, no albumen. The blood in the urine, therefore, came from the tumour, and passed down the ureter into the bladder during the manipulation of the kidney in its removal.

She progressed satisfactorily, though her recovery was protracted by some suppuration and the discharge of two of her continuous sutures and two or three of her ligatures. She is now getting about, and feels well, though she has not yet regained her ruddy complexion.

(Read before the South Australian Branch of the British Medical Association.)

"SOME INTERESTING GYNÆCOLOGICAL CASES."

(Read before the Sixth Intercolonial Medical Congress at Hobart.)

By J. A. G. Hamilton, B.A., M.B., T.C., Dublin;
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Hon. Gynæcologist, Adelaide Hospital.

WHEN the hon. secretary of this section requested me to write a paper on some gynæcological subject, I wrote offering a paper on "Uterine Deviations," but as I had met with a few interesting cases in my work during the last few months I thought the notes of these cases would be of more practical interest to the section than the well-worn subject of uterine displacements; so, with the consent of the hon. secretary, I altered the title of my paper.

CASE I.—HÆMATO-COLPOS LATERALIS DEXTER.

There is no doubt that this malformation is by no means a common one. This is the first case I have met with in over 20 years' practice. The present-day teaching is decidedly defective on doubling of the vagina and uterus and allied malformations. All the descriptions in the standard works on gynæcology are much too complicated, and are of little value from the standpoint of the practical surgeon. Little notice is taken of the clinical aspect of the cases met with, and too much notice given to the pathological anatomy as found by post-mortem examination, and the whole subject is further complicated by minute distinctions and Latin phraseology.

I admit that I was unable to make a correct diagnosis in this case, but I feel sure that my experience in this one will enable me to make a correct diagnosis in the next case of the sort I meet with. Had I carefully read Dr. Pinnock's article in the transactions of the Brisbane Congress I would not have made the mistake made by every other operator on first acquaintance with this condition.

A. L., æt. 17 years, a strong, healthy-looking girl, was transferred to my ward in the Adelaide Hospital from a medical ward on October 7th, 1901.

History.—Commenced to menstruate at 16 years of age. Periods always regular up to April last; then 8, 11, 7 and 8 weeks very scanty. Pains in back and sides at the time. "Whites" since Easter. Eight months ago began to be troubled with pains in her back and right side. About nine weeks ago noticed a lump in abdomen. For last few months has had occasional attacks of vomiting.

On Examination.—Lower part of abdomen occupied by a rounded elastic tumour, filling greater part of pelvis, extending close to pelvic wall on right side, but not quite reaching pelvis on left side. A little below and to left of umbilicus is a rounded, slightly movable tumour about the size of a tennis ball. In the right iliac region, close to the anterior superior spine, is another similar tumour, somewhat larger and more fixed.

P.V. A rounded elastic, rather than cystic, mass was felt bulging into and almost filling the vagina. A finger could be with difficulty pressed up into left fornix, and an os could just be reached by a finger-tip high up on that side. Cervix was obliterated. Sound was passed with difficulty 3½ in. and to the left. Dr. J. C. Verco, who had transferred the case to me, and several of my colleagues on the staff saw her on the operating table, and various opinions were hazarded as to the nature of the tumour. Professor Watson happened to come into the theatre at the time, and examined the case at my request. He immediately said it was a case of hæmato-colpos, and advised me to operate through the vagina. However, as the condition was new to me, I decided to open the abdomen and explore for myself.

Operation.—October 10th, 1901. When the abdomen was opened by the usual median incision a thin-walled sausage-shaped cyst presented itself, extending half way up to umbilicus. On further examination this was found to be the upper part of bladder, pushed up between the pubic bone and the pelvic tumour. This parietal excursion of bladder I have often met with in vaginal and cervical enlargements. A catheter was passed, urine drawn off, and bladder subsided to its normal position. A large tumour was then seen, with a deep sulcus in the middle. To the left a normal uterus, with normal appendages, was seen; to the right, and perched somewhat on the top of the tumour, was another uterus, somewhat distended, but with its ovary and tube normal. The tumour proved to be a didelphic uterus, tubes and ovaries normal, with a septate vagina, right imperforate. The abdominal wound was covered with sponges, and the patient put in the lithotomy position.

The left cervix was hooked down as well as possible, an incision made in right vagina as close as possible to left os, evacuating 30 oz. of ropery, tarry blood. Vagina washed out and lightly packed with iodoform gauze; the cavity was daily washed out and lightly packed. On the 27th the cavity in right vagina was enlarged to admit two fingers, and its edges stitched. Patient made a good recovery; when last seen early in January she had menstruated once naturally. There was still a little purulent discharge from right vagina; right os could not be located. I agree with Dr. Pinnock when he says in his paper at Brisbane, on a similar subject: "There is little information in the text-books upon the history and symptoms of patients suffering from this malformation."

As the subject is scarcely less important from the standpoint of the obstetrician, I think it is worthy of more attention and better teaching than is generally accorded to it. I have looked up all the standard books on disease of woman and obstetrics, and cannot find a diagram of a didelphic uterus similar to this one, except in Duhrssen's little manual, where there is a diagram of a similar case, except that in his diagram the uterus on the imperforate side is more distended than in my case. Had I taken the advice of my friend, Professor Watson, I might have saved the patient the slight risk attending the abdominal section. But still, I feel sure, the lesson is more firmly impressed upon my mind by seeing the whole thing mapped out before me.

CASE II.—UTERINE MYOMA, WHICH MIMICKED A PREGNANT UTERUS.

Mrs. R., aged 38, first seen in July, 1901.

History.—One child 12 years ago, no miscarriages, menstruation regular, painful, not profuse, complains of pains in back and left side, frequency of micturition, bearing down pains.

On Examination.—Abdomen occupied by a rounded elastic tumour, extending a little above umbilicus, equal to a five months' pregnancy. There was a distinct pigmentation of linea alba, but breasts were flaccid, and did not contain fluid. P.V. cervix patent, softened and enlarged, sound passed 2½ inches. The junction of uterine body and cervix was flaccid and compressible as in "Hegar's Sign." Diagnosis of ovarian cyst or a soft myoma of uterus. Operation advised. On account of family reasons she had to leave the hospital, and did not return until end of October, when her condition was much the same as four months previously.

Operation.—Nov. 1, 1901. Abdomen opened by median incision from umbilicus to pubis. A

large rounded tumour presented, very much like a five months' pregnant uterus. The walls were pliant, and contained a hard mass, which on palpation simulated the head, buttocks and shoulders of a fetus. Had I not known the history of the case, I might have feared I had opened an abdomen containing a pregnant uterus. The right side, the easy one, was first attacked. The round ligament of that side lying in front of the tumour was double clipped, divided and ligatured. The top of infundibular pelvic fold on same side was clipped between two forceps, cut, and divided. A ligature was placed round ovarian vessels. The uterine artery was clipped with a Howard Kelly forceps, cut and ligatured. A Doyen was placed on the uterine cornu, and the right broad ligament divided, the tumour was then easily delivered. The left round ligament, which was below the tumour, then became apparent, and the vessels were dealt with as on the other side, the peritoneum in front divided between the two clips, and the bladder pushed down. The tumour was then amputated, leaving a nice cup-shaped cervix (this latter was much smaller than I expected). A piece of gauze was pushed into vagina, and edges of cervix strapped together with five interrupted tendons, peritoneum top stitched all round, and abdomen closed by four layers of sutures.

Patient made an excellent recovery, and was discharged on December 1st, a month after operation.

The tumour, on examination, turned out to be an intra-mural hard myoma, developed in the posterior wall of the uterine body, and entirely surrounded by a myxomatous capsule, easily mistaken for the amniotic sac, between which and the uterine tissue was a space containing blood-stained fluid. The uterine cavity was uninvolved, and the space around the growth had nothing in common with the uterine cavity, which it simulated. The junction of the corpus uteri and cervix was flaccid and compressible. This condition, known as "Hegar's Sign," is an interesting feature in this case. Many authorities assert that "Hegar's Sign" is never present except in a pregnant corpus. This sign depends on a marked softening and compressibility of the isthmus. That portion of the uterus, which is in part the lower extremity of the corpus, in part the upper of the cervix. This segment of the uterus becomes soft, thin, yielding and elastic, while the fundus above and the cervix below remain comparatively firm. If Hegar's Sign is present, is it a positive sign of pregnancy? C. Reinl and P. Compes, two of Hegar's assistants, consider it as such, and state that it does not occur in the presence of tumours. Galabin says that the compressibility

is due to the walls of the fundus becoming expanded and softened, while the ovum does not yet fill its cavity. Noble says: "I have never seen Hegar's Sign present when the uterus was not pregnant." On the other hand, Hirst states that the sign is not always appreciable in pregnancy, and that it may also be elicited in a uterus softened by congestion or inflammation. Lusk thought that it was not conclusive, as if absence had been observed in early pregnancy, and a condition closely resembling it had been noticed in certain morbid conditions of the non-pregnant uterus. Jellett says: "This is a reliable sign of pregnancy, very constant and very characteristic. It may be obtained from the second month onward, but may possibly be obtained in a non-pregnant uterus." We thus have eminent authorities differing on the value of this sign as a diagnostic symptom. Which is the correct view my experience will not permit me to say definitely, but I am unable to find reported a case of myoma of the uterus in which this sign was present.

Myoma of the uterus which simulate pregnancy are frequently met with. Many skilled operators have mistaken a pregnant uterus for a myoma, and only found out their mistake when the abdomen was opened. I operated on a spinster, aged 34, a short time ago for myoma of the uterus; the question of pregnancy was out of court. However, when the abdomen was opened a tumour in many ways resembling a pregnant uterus presented itself; so much so that when the sail hook, which I use to deliver large myoma, tore through the then wall of the uterus and some fluid escaped, and a dark mass appeared through the tear (which was a sub-mucous fibroid, but closely resembled a fetal head), a bystander of great experience thought I had opened a pregnant uterus.

CASE III.—ADENO-LIPOMA OF OVARY AND ADENO-MYXOMA OF PANCREAS.

Mrs. C., *et. 63*, seven children, youngest 19 years old. Menses ceased at 50. For last 12 months has had off and on a malodorous, blood-stained, vaginal discharge; sometimes passes clots.

When first seen was very emaciated, abdomen distended with free fluid. There was also some fluid in right pleura. The lower part of abdomen was occupied by an irregular shaped tumour, extending nearly to level, and somewhat to right of umbilicus. P.V. vaginal walls protruding, cystocele and rectocele; cervix softened and patent pushed up against pubic bone, fundus pushed down into Douglas's pouch and slightly to right; sound passes

4½ inches. At this time I saw her in consultation with Dr. W. T. Hayward; we looked upon it as a case of polyserositis, with probably a malignant tumour of right ovary; however, under treatment with two or three aspirations of abdomen and pleura, her general health improved very much, and when the abdomen was free of fluid, the tumour, which had grown rapidly, could be more definitely palpated, and was found to be an ovarian tumour, springing from right side. It was decided to operate.

Operation.—November 11th, 1901, abdomen opened by median incision, a large rounded semi-solid cystoma presented about the size of a large coconut. The tumour, which had a narrow pedicle, was easily and quickly removed by ligaturing the ovarian vessels and dividing the broad ligament across to the uterine cornu, clipping and tying the up branch from the uterine when it spurted. Unfortunately some evil fate tempted me to explore the abdomen further, and I found another tumour about the size of a tennis ball, situated behind the stomach and attached to the pancreas. I found this easily enucleated in front, so was tempted to go on; but unfortunately the lower part was firmly fixed in the pancreas, and in trying to enucleate it the superior mesenteric vein which was attached to tumour got wounded. The patient never recovered consciousness after the operation, but lay in a semi-comatose condition, only passing seven drachms of urine in the first 24 hours, and died on the fourth day. Had I limited my attention to the ovarian tumour I feel sure the patient would have survived, but I am afraid my ill-advised surgical zeal brought about the fatal termination. This was particularly vexing, as it was my first death in a series of 65 oeliotomies, including nine hysterectomy, extending over a period of six months.

On examination of the tumours, the ovaries, one of which weighed 2½ lb., was solid and translucent; its Fallopian tube was stretched over it. As the tumour got cold it lost its translucency; it was an adeno-myxo-lipoma, and contained glandular elements and myxomatous stroma. The pancreatic tumour consisted of a network of epithelial cysts, full of colloid material. There was probably some connection between these two tumours.

CASE IV.—ADENO-ANGIOMA OF ROUND LIGAMENT, SIMULATING A HERNIATED OVARY.

Miss T., aged 46.—In 1892 I saw this patient with my late colleague, Dr. Way. She then complained of a painful tumour in her right inguinal region. It was excessively painful to the touch, and on pressure, produced the

characteristic sickening feeling experienced on pressure on an ovary. The patient assured us the pain and swelling increased at her menstrual periods. She had been ordered to wear a truss by her medical attendant, but was unable to do so on account of the pain it caused.

P.V. the uterus was normal; the left ovary could be felt, but no ovary could be felt on right side. We naturally concluded she had a herniated ovary. A few months later, whilst travelling in Europe, she consulted a leading gynaecologist in London. He agreed with our diagnosis. When she returned to Adelaide we removed this inguinal tumour, which to the naked eye resembled an ovary. A microscopic examination revealed an epithelial lined cavity, which confirmed us in our diagnosis.

In November, 1901, she consulted me again for a painful tumour in her left inguinal region. She also had profuse menorrhagia and metrorrhagia. On examination a tumour, similar in character to the one removed nine years before from the right inguinal region, was found to exist in the left side. P.V. the uterus was found to be the seat of a firm myoma.

Operation.—November 10, 1901. The abdomen was opened and the uterus extirpated, but to my surprise both ovaries were present in their normal position. The tumour in left inguinal region was also removed; it was adherent to skin, and also to pouch of peritoneum; it bled freely; round ligament was thicker than usual. On examination the inguinal tumour was found to contain dilated vessels, muscular and fibrous stroma, and numbers of epithelial lined cavities. I do not know where the epithelium comes from, but presume it was from the Wolffian body. When the uterine tumour was cut into, it disclosed an ivory white myoma, size of a hen's egg; a second intra-mural tumour of the same size existed in the posterior wall. There was hypertrophic endometritis. This, no doubt, had caused the menorrhagia.

CASE V.—HYSTERECTOMY FOR MALIGNANT ADENOMA OF CORPUS UTERI, WITH PAPILLOMA OF RIGHT OVARY AND VAGINA.

Miss P., spinster, aged 58. Menses ceased at 54. Two years after, a blood-stained vaginal discharge appeared. This continued for some time, and early in 1901 she consulted her medical attendant, who found a small papilloma in her posterior vaginal wall, which bled on touching. No abdominal examination was then made. The small growth in vagina was removed, and the bleeding ceased for a time. The growth was, no doubt, an implantation from the then unsuspected malignant adenoma of corpus uteri.

After a time the bleeding returned, and she complained of considerable abdominal pain and distension. This suddenly ceased, and she had a sense of relief; no doubt, from the accidental rupture of the ovarian cyst.

First seen on October 10th, 1901. On examination, abdomen contained free fluid; a rounded, solid tumour could be felt, reaching to within one inch of umbilicus; P.V. uterus enlarged, pushed down; sound passed five inches.

Operation.—November 15th, 1902. When the abdomen was opened a quantity of blood-stained fluid escaped. The right lower quadrant was occupied by a cauliflower-looking mass. Uterus was the size and shape of a three months' pregnancy. Left ovary enlarged to three times its normal size; it was multi-cystic. The corpus uteri was removed by Howard Kelly's method. The finger was introduced as far as possible down between bladder and vagina; cervix drawn up, as first, like a reversed Doyen. Several pints of warm saline were used to empty the peritoneal cavity of a quantity of rust-coloured fluid. The peritoneum was a dull red colour, more vascular than normal. There were some enlarged and tender glands in both groins; they gradually subsided, and although still present are much smaller and not painful; this makes one think they were inflammatory rather than neoplastic. The patient made a good recovery, and now, three months after operation, seems quite well.

SOME SURGICAL CASES.

By H. L. Maitland, M.B., Ch.M. Sydney, Hon. Assistant Surgeon Sydney Hospital.

THE APPENDIX IN THE SAC OF A SUB-PERITONEAL HERNIA.

A MALE, aged 42, was admitted into the Sydney Hospital with a reducible inguinal hernia on the right side and an irreducible inguinal hernia and hydrocele on the left side. He stated that he had always been ruptured; had never worn a truss. Three months ago the right rupture had become swollen and tender, so much so that he could not bear the slightest pressure on it.

I did a Bassini on the left side, removing a considerable portion of omentum and a radical cure for the hydrocele, through the hernial incision. On the right side I found a sub-peritoneal, or sliding hernia of the ascending colon, the par glissement hernia of the French, with a long, bent bulbous-ended appendix adherent to the gut. The appendix was removed, and on separating it a small tear was made in the

colon, which was stitched. The recovery was perfect, the wounds healing by first intention.

The explanation of this (sub-peritoneal) form of hernia is that the peritoneum, which is naturally loosely attached in the iliac regions, from developmental reasons may be abnormally so, allowing the colon partially covered with peritoneum to slip down. It can easily be understood from the anatomical relation of the peritoneum to the colon that the sac is deficient usually on its postero-lateral aspect, so that the peritoneum forming the sac instead of passing around the bowel passes over it, leaving the bowel outside the sac.

It is almost impossible to do a radical cure with safety in this class of hernia. The method I adopted was simply to push up the attached bowel, and then close the abdominal rent with silk sutures passed from below the intestine, through the sides of the ring. This method is safe, but I feel sure that hernia will, sooner or later, recur. The closure of the layers was done as in a Bassini. Any operation which attempts the separation of the gut is likely to lead to disaster, as its blood supply will probably be cut off, and sloughing take place. Heidenreich reports two cases in which this method was adopted and both the cases were followed by faecal fistula. In another case recorded by Camplendon a permanent artificial anus was the result. Jillard, of Geneva, after several failures to cure this class of hernia, excised the protruding bowel, and did an end-to-end anastomosis with success.

NEPHRO-URETERECTOMY FOR IMPACTED STONE IN URETER OF FLOATING KIDNEY, WITH ADVANCED PYO-NEPHROSIS.

A young married woman, aged 26, was sent to me by Dr. Lees, of Adelong.

She had a tumour about the size of a foetal head on right side of abdomen, freely movable in every direction; it could be pushed over as far as the middle line; she had some frequency of micturition. The patient stated that she had been treated six years ago for floating kidney. She did not give a history of renal colic or hæmaturia; had noticed the tumour growing larger and her urine becoming thick the last six months; she never had gravel, and gave a good family history.

The urine contained a large quantity of pus; no tubercle bacilli.

Cystoscopic examination, after thorough irrigation, showed long coils of thick pus issuing from the right ureter. The pus was sufficiently thick to preserve its coil-like shape for some time. On pressure over the tumour the pus could be seen to issue from the ureter. The

medium was too dense to enable me to see the orifice of the left ureter. On segregation normal urine was collected from the left side, nothing collected from the right, the pus being too thick to run. As the kidney was simply a pussac I removed it through the loin. On exploring the ureter a calculus was felt just below the pelvic brim, and I removed the ureter to down about 1 in. below the calculus. The stump of the ureter was cauterised with Paquelin cautery, and tied with catgut. The loin wound was well drained. The recovery was uneventful. The presence of calculi in a floating kidney, or in the ureter of such a kidney, may simply be a coincidence, but I have noticed before when doing nephropexy that the kidney is occasionally hydro-nephrotic. This condition, transitory though it may be, tends towards the deposit of the urinary salts from the retained renal secretion. This case is one which exemplifies the value of the use of the segregator combined with that of the cystoscope. The cystoscope showed pus coming from the ureter. The segregator enabled me to collect and examine the secretion of the other kidney.

The removal of the ureter was clearly indicated in this case. If it had been left with a calculus impacted it might have led to further suppuration, as has been frequently recorded.

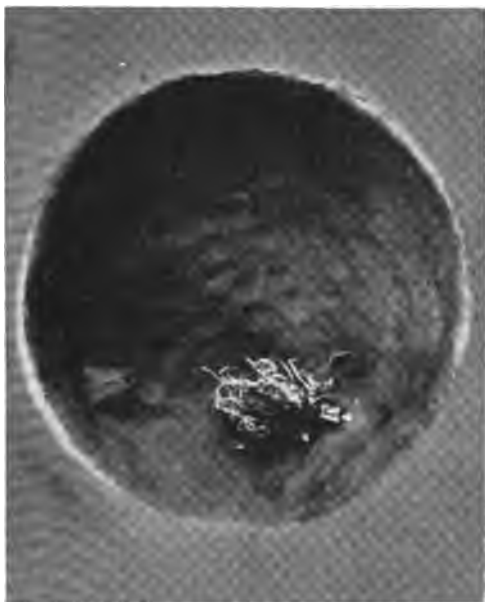
REMOVAL OF VILLOUS PAPILLOMA OF THE BLADDER.

A male adult, aged 59, was admitted under me with the following symptoms: hæmaturia, frequency of micturition, loss of flesh, constant left loin pain, and very marked anaemia. His symptoms had extended over two years. The hæmaturia was at first symptomless, and at odd intervals, but during the last six months, he had grown worse, the other symptoms mentioned being superadded. There was marked increase in the severity of his symptoms since his bladder had been sounded by another practitioner five months previously. After thorough irrigation the bladder was examined with the cystoscope, when a pedunculated growth, with long thin villi, coated with tails of mucus, and in places with phosphatic deposit, could be seen springing from the neighbourhood of the left ureter. The pedicle could not be clearly made out, but on turning the patient on to his right side, the villi stretched over as far as the orifice of the right ureter.

I removed the tumour suprapubically, a clamp being left on the pedicle for 24 hours. This clamp included a portion of the mucous membrane of the bladder. The bladder was too small, the pedicle too broad and short, and

the area of operation too deep for me to remove the base of the pedicle by incision.

The resident pathologist (Dr. Griffiths) reported that the growth was a benign papilloma, no sign of malignancy in the pedicle. The bladder was drained and irrigated daily for a month; it was allowed to close when the urine was perfectly clear. The patient made a slow recovery. Cystoscopic examination made a few days ago reveals a puckered scar just below the left ureter. The orifice was patulous and did not close, a condition due to, probably, contraction from cicatrization, and also to hypertrophic changes in the ureter, due to the obstruction caused by the tumour.



VILLOUS PAPILLOMA OF THE BLADDER
FROM BELOW LEFT URETER.
(From plasticene model of living bladder.)

Bladder growths are always of interest on account of their comparative rarity, and the question one is called upon to decide before operation is, "Is the tumour malignant or not?" This is very often impossible to do on cystoscopic appearances alone, but there are certain points that aid one. Very benign growths are usually pedunculated, malignant growths usually sessile. Long luxuriant villi are more commonly seen on the benign growths, but malignant growths may be covered with long villi, and the harder varieties of papilloma may appear in cystoscopy to be devoid of them. Pain and irritability of the bladder are early symptoms of malignant disease, while painless

haematuria is an early symptom of benign papilloma.

I show these pictures, they are photographs of plasticene models, and they show the appearance of the growth in cystoscopy; this method of representing the bladder growths is the one suggested by Hurry Fenwick. The bladder is examined with the cystoscope, a model made of the tumour as seen, and a photograph taken of the model.

STRANGULATED FEMORAL HERNIA WITH EXCISION OF 12 INCHES OF GANGRENOUS GUT.

A female, aged 65 years. A right femoral hernia had been present for 20 years; it had always been irreducible. Symptoms of intestinal obstruction had come on about 48 hours previous to admission into the hospital. The operation revealed about nine inches of small intestine in the sac, as well as a considerable quantity of adherent omentum. The intestine was cedematous, almost black, had lost its lustre, and had a foetid smell. There was considerable quantity of prune juice serum in the sac. The opened sac was well irrigated with biniodide and then sterilized water before dividing the obstruction. The bowel was then drawn down and divided through healthy portions, and an end to end anastomosis made with Murphy button. The button was passed on the 16th day. The patient made a good recovery.

[Read before the New South Wales Branch of the British Medical Association.]

CLINICAL AND PATHOLOGICAL NOTES.

EPIDEMIC JAUNDICE.

MR. FALKNER'S notes on page 256 of the *Australasian Medical Gazette* are interesting and instructive. They bring to my mind an epidemic which occurred in my practice in Heathcote, Victoria, about three years ago. "My Epidemic," if the term be admissible, was noteworthy, because all the sufferers were children. I attended 20 or more cases from three years up to about 13, and one case in a girl about 18 years of age. Most of the cases came on ten days or a fortnight after apparent recovery from influenza, and ran a mild course. The worst case was the 18 year old girl, who was very ill for ten days, and had as a complication ulcerative stomatitis. In all cases the yellowness was very pronounced. All recovered and have suffered from no ill after-effects. These cases were widely scattered over a wide

area; 25 miles separated two of the families. There seemed to be a number of distinct foci with unaffected people interplacéd.

In Hirsch's "Geographical and Historical Pathology" (New Sydenham Society, 1886), page 417 *et seq.*, there is an article on "Epidemics of Jaundice," which states that from the year 1745 till 1885 34 distinct epidemics are recorded, 15 confined to bodies of troops, one each in a shipyard, a house, a prison, 12 in a town or village (one of these at Birmingham in 1852 being confined to children), and four were over a wider area. Several of these epidemics were attributed to dietetic causes. In several widely prevalent epidemics the cause was supposed to be a specific infection, such as pits filled with putrefying matter being disturbed, drainage faults, tents pitched on damp ground tainted with dead animals and other putrefying matters. In several such incidents the correction of the nuisance concluded the epidemic. One specially interesting cause was vaccination with bad lymph. In 1883, from August 13th to September 1st, at Bremen, 1289 persons were vaccinated by six doctors at the shipyard with humanised lymph in glycerine. Of these, 191 took jaundice in the course of a few weeks. Other doctors vaccinated 87 of the men away from the yards; none of these took jaundice. And of 500 men vaccinated at the same time, with a different lymph, none had subsequent jaundice.

In the article various types of the disease are described. Season and weather are not credited with any influence.

ALFRED W. ESLER, M.D.

Heathcote, Victoria.

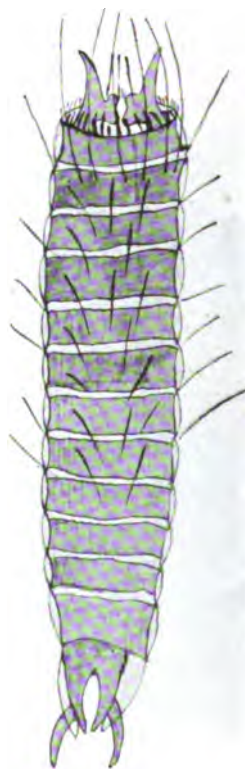
A RARE WORM PASSED IN THE URINE.

A SCHOOLBOY, *æt.* nine years, was brought to me on May 3rd of this year. He has never been out of this State, and has never been ill in his life before. He is a big drinker of *filtered* rain-water (to which his father always added a little Condyl's fluid), but no animalculæ or mosquito larvæ were present in this water. His paternal uncles and aunts all died of kidney troubles, *e.g.*, cancer, Bright's disease, ruptured kidney, etc. I found him a splendidly developed boy. No fever. Pulse normal. No symptoms of any kind. Eats, drinks and sleeps well.

Present Illness.—For the past month his father noticed that the chamber used by his son was always stained in the morning a dark red, and on examination of the urine, which was clear, he saw a number of "small animals" in it; so thinking of some possible source of contamination, he procured a white porcelain pot,

boiled it, and got his son to micturate into it. "These animals," however, were still present in the urine.

The urine I examined was a very dark-reddish amber in colour. Specific gravity 1020, no albumen, no sugar or deposit of any kind. Swimming about in the urine were a number of animalculæ resembling mosquito larvæ in their appearance and movements. On microscopical examination I found them to be about $\frac{1}{8}$ -inch long, composed of 13 segments presenting



two hooks at the head end, and surrounded by a row of fine hairs. On the proximal side of the second segment there are eight or nine hairs much longer; extending beyond the end of the hooks, and on each succeeding segment till the ninth, there are three or four hairs extending to the middle of the next segment, the last five segments being devoid of hairs. At the distal end are six blunt processes, two extending much further than the rest. The body contains no definable air tube or alimentary canal, although many red blood corpuscles lie scattered thickly through the middle segments.

Professor Watson said he has seen these same animalculæ in the urine of soldiers in South Africa. This boy has had nothing to do with the returned soldiers in any way.

I put him on quinine, gr. 2, internally every four hours. His father said the worms passed after taking his medicine were very active in their movements and soon died. On May 10th I washed out his bladder with warm boracic acid solution, and since that date there has been no trace of this complaint.

I cannot find any mention of this parasite in Leuckardt, Manson, Neumann, or any of the pathological societies' transactions, or the current literature, so I am inclined to believe it is new to science.

E. ANGAS JOHNSON, M.D., M.R.C.S.
Adelaide, S.A.



CIRROID ANEURISM OF SCALP.
DR. POULTON'S CASE.

A CASE OF CIRROID ANEURISM.

A GIRL, aged 18, was admitted to the Adelaide Hospital in April, 1902. She had a pulsating tumour, with very thin walls near vertex, which could be partly emptied by pressure. The temporal, frontal, and occipital arteries were all enlarged. There was an immense posterior auricular vein, and a loud bruit was audible. The tumour had bled freely from the scratch of a comb. The blood supply was diminished by ligature of many of the afferent arteries, including the temporals, the occipitals, the frontals and supra orbitals. Under ether on April 15th five vessels were tied; on April 22nd

three vessels were tied; on May 5th three vessels were tied; on May 9th three vessels were tied. On May 16th a large flap consisting of the dilated vessels and the scalp was raised upwards and forwards. All the remaining vessels were tied, the angioma removed, and the scalp replaced, the redundant folds being left. Asepsis was not maintained, and union was slow and attended by some limited suppuration. The hair is now growing very slowly, and all evidence of hypertrophy in the afferent arteries has subsided.

Adelaide.

B. POULTON.



CIRROID ANEURISM OF SCALP.
DR. POULTON'S CASE.

Death from Nicotine Poisoning.—An inquest was held at Tingha (N.S.W.) in August last on the body of a girl aged 19½ years who died 25 minutes after an enema of infusion of tobacco for constipation ordered by an unqualified practitioner named St. Omer. The Government Analyst found in the stomach, portions of liver, spleen and kidneys, six minims of the alkaloid nicotine. The jury brought in a verdict that the deceased "died from the effects of nicotine poison as the result of an injection of tobacco water administered under the direction of George Decosta St. Omer, and we further find that we do not consider the said George Decosta St. Omer guilty of wilful negligence or carelessness in the administration of the injection." Nicotine is one of the most powerful alkaloidal poisons, and several deaths have been recorded as having occurred after enemata of tobacco infusion.

MIRROR OF HOSPITAL PRACTICE IN AUSTRALASIA.

ADELAIDE HOSPITAL, S.A.

ÖOPHORECTOMY FOR INOPERABLE CANCER OF BREAST.—SEQUEL.

(Under care of Leonard W. Bickle, F.R.C.S. (Eng.),
Hon. Surgeon Adelaide Hospital).

JANE C., *æt.* 60 years, single, was admitted into Faith Ward January 23rd, 1902. Patient complained of a tumour of right breast, which was ulcerated, and very painful, and also of another lump near the armpit. She said this began around the nipple some five years ago, but lately had become very painful, and was growing rapidly. She had lost flesh very rapidly of late, but felt well.

On examination a fungating growth was found involving the whole of the right breast. The nipple had disappeared. The whole of the skin was affected, red and shiny in parts, with considerable ulceration of upper, inner, and lower outward quadrants. The whole growth was fixed to the ribs. At the lower border of the pectoralis major, at the axillary border, there was to be seen and felt a glandular growth equally fixed to the ribs, but the skin had not yet ulcerated, though adherent to it. Both growths were painful, especially at night, and when handled. Left breast was free. The chest was normal; temperature normal.

Abdomen.—She complained of pain in the epigastrium, but there was no enlargement or tenderness of the liver. No growths could be felt in the abdomen.

Urine.—1025 acid, no albumen, no sugar.

The case was quite unfit for the removal of the growth in the ordinary way. The possibilities of relief by the removal of the ovaries was put to the patient, and she consented readily. On January 28th she was anaesthetised and placed in the lithotomy position for vaginal oöphorectomy. On examination there was found to be a very long hard conical cervix just protruding from the vagina. On opening the pouch of Douglas the right ovary was found to be too large to pass the uterus. The uterus itself being enlarged it was decided to turn the operation into a vaginal hysterectomy, instead of opening the abdomen. Removal was readily effected. On examination the uterus was found to be studded with small fibroid tumours about the size of small marbles, nearly a dozen in number. The right ovary

was nearly as large as the fundus of the uterus, and proved to have a large fibroma. The left ovary was atrophied and cystic. Fifteen grains of chloretone had been given before the operation. There was no post anaesthetic sickness. The patient experienced very little shock.

February 4, 1902.—Patient very well; very comfortable; free from pain; vaginal wound healing well. Both growths slightly movable.

February 7th.—Doing well. Both growths decidedly movable.

February 19th.—Doing well. Ulceration decidedly less; no pain.

February 25th.—Complains of abdominal pains and diarrhoea. Careful palpation did not reveal any signs of any growths in abdomen.

March 2nd.—Still diarrhoea. Some suspicious lumps in the walls of the rectum; none in the abdomen.

March 11th.—Still occasional abdominal pains. No further local rectal trouble. Ulceration of breast less. Non-ulcerated parts painted with collodion. The ulcerated parts were dressed with an ointment consisting of balsam of Peru, 3 gr., and ung. cetacea 3 gr. Treatment with thyroid extract, 5 gr., twice a day, was commenced.

March 13th.—Better. Sent to convalescent hospital.

April 15th.—Reports herself as much better. Has gained flesh considerably. No pain at all. Sleeps well at night. Ulceration very slight. Growths both decidedly smaller and more movable.

The patient did not report again as directed. On inquiry it was found that death took place on June 24th, five months after the operation. The friends stated that the wounds in the breast had quite healed, and she had no recurrence of pain.

Remarks.—The question of the value of the removal of the ovaries in inoperable cancer of the breast is still so much *sub judice* that cases can be only recorded without any general deductions. In this case there was a tumour of slow growth taking a rapid action, with much pain, rapid emaciation, and also a fungating ulceration. As a result, ulceration was checked, and then complete healing, with diminution of size of growth, and mobility in place of fixation took place. Emaciation was checked and flesh regained. Finally there was a complete absence of pain brought about. One cannot say that life was prolonged, but, as the last five months of life were rendered painless, in this case at any rate the result of the operation was beneficial.

REVIEWS AND NOTICES OF BOOKS.

THE HEALING OF NERVES. By Charles A. Ballance, M.S., F.R.C.S., Assistant Surgeon to St. Thomas' Hospital, and Lecturer in Surgery in the Medical School; Surgeon to the National Hospital for the Paralyzed and Epileptic, Queen Square, London; and Purves Stewart, M.A., M.D., M.R.C.P., Assistant Physician, Westminster Hospital, etc., London: Macmillan & Co. Price, 12s 6d.

This is a valuable contribution to the vexed question of the process of regeneration of peripheral nerve fibres. We are all familiar with what is known as the Wallerian degeneration of nerve fibres, that is, the change which takes place in the peripheral portion of a nerve fibre separated, either as a result of trauma or disease, from its trophic centre, the nerve cell. But the sequence of events which ensue in the peripheral portion, and how restoration of function has been effected when the divided ends of a nerve have been sutured, has been a matter of dispute between different observers. According to some, the peripheral divided axis cylinder degenerates, and the nerve sheath forms, as it were, a scaffolding along which the new axis cylinder, budding forth from the central divided end, makes its way, thus replacing the old one. According to others, including Tizzoni, Cattani, von Büngner and Kennedy, a partial regeneration of the axis cylinder takes place in the peripheral end, and this becomes complete when the two ends of the nerves are sutured. In support of this latter view is the fact that after suture of a divided nerve, sensation in the part affected may return in so short a time that it would be almost impossible to assume that a new axis cylinder had extended along the sheath of the peripheral portion of the nerve, and restored sensory connection. The experiments, which are fully recorded in this work, and the histological appearances described and figured from sections prepared by Weigert's method for the selective staining of the medullary sheath, by Cox's modification of Golgi's method for the impregnation of the axis cylinders, and Van Gieson's method for the staining of the cellular and protoplasmic structures, seem also to confirm this view.

The first part of the work deals with the histological changes in nerves experimentally divided, and then sutured again directly, and also after the lapse of some time, or left unsutured, or in which a portion of the nerve has been excised, and the two ends united by a graft. The series of changes in the myelin sheath, the axis cylinders, and the cellular elements are fully described and beautifully illustrated. In the closing chapters are given the general conclusions from the authors' own researches, and finally the bearing of these conclusions on the neurone theory is discussed. The authors conclude with the following statement:—"The presence of a neurilemma sheath constitutes no mere minor difference between the nerve-fibres of the central and those of the peripheral nervous system. It is of fundamental significance, since upon the presence of neurilemma cells depends the possibility of regeneration and recovery after injury. The neurone theory, in so far at least as it applies to the peripheral nervous system, must in our opinion be discarded. The peripheral nervous system is to be considered as made up of chains of cells, set end to end, whose axis cylinder processes fuse together to form continuous paths—the peripheral axis-cylinders." Some well-known neurologists, however, do not accept these conclusions, and see nothing in the peripheral regeneration of axis-cylinders opposed to the neurone theory.

The authors and publishers of this book have combined to produce a work well worth careful study, not only by experimental pathologists and neurologists, but also by surgeons who are interested in the questions of nerve suture. G.E.R.

THE PRINCIPLES AND PRACTICE OF MEDICINE. By William Osler, M.D., LL.D. Edin., F.R.S., F.R.C.P., Professor of Medicine in the Johns Hopkins University and Physician-in-Chief to the Johns Hopkins Hospital, Baltimore, etc. Fourth edition. Edinburgh and London: Young J. Pentland. Sydney: Angus and Robertson. 1901.

The popularity of Osler's *Medicine* is shown by this (the fourth) edition. It has been largely rewritten, the new matter embodied in it being the result of the larger clinical experience and careful work done at the Johns Hopkins Hospital by Professor Osler and his staff of assistants. A work of this kind is of all the greater value as representing the matured views of so well-known a physician and clinical teacher. The article on Typhoid Fever has been in great part rewritten, and one turns with interest to learn the latest views of Professor Osler on the subject of dieting and treatment. In this disease he still adheres to a restricted diet, consisting chiefly of milk, and withholds solid food until the temperature has remained normal for at least ten days. He says: "It is possible that we give too much food. Inglis has shown that cases do very well on cold water alone. The outcry against milk in some quarters is, I am sure, unfounded. It causes less intestinal fermentation than any other food, it rarely disagrees when diluted, and when alternated with egg-albumen forms the ideal diet for typhoid patients." With all due respect to Prof. Osler we are disposed to differ from this dictum. The digestive powers of different patients vary considerably, and we think that the dieting of typhoid fever patients is a matter of study for each individual patient, and that no hard and fast lines can be laid down which will be universally applicable. Professor Osler speaks highly of the cold bath treatment, and shows that 829 cases of typhoid have been treated in his wards with a mortality of only 7.5 per cent.; this including all cases, those admitted and dying in 24 or 48 hours after admission, as well as those in which the diagnosis was only made at the autopsy.

The subject of malaria has been dealt with fully in the light of the most recent researches on etiology and prophylaxis. Much new matter has also been added to the chapter on pneumonia. Dr. Futcher has analysed the cases of diabetes and gout occurring at the clinic, and incorporated the new matter in the articles on those diseases. The more recently recognised diseases, such as adiposis dolorosa, albumosuria, oxaluria, combined sclerosis of the cord, myasthenia gravis, congenital aneurism, etc., have been included in this edition. These additions and alterations have brought the work well up to date, and we have no doubt it will deservedly continue to hold a foremost position as a text-book for students of medicine. G.E.R.

Tariff Notes.—The customs revenue from drugs and chemicals in August amounted to £1300 in New South Wales, £1200 in Victoria, and £800 in Queensland. Epsom salts have been reclassified by the Minister, who has graciously allowed them to be called medicines, and admitted free, instead of oilmen's stores, 15 per cent. We should be thankful that they were not declared manufacturers of metals, or agricultural implements, or articles of wearing apparel. Salicylate of soda is the latest line to be stopped by the customs. Said by the officials to be a proprietary medicine.—*Chemist and Druggist.*

THE AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, 20TH OCTOBER, 1902.

HOSPITAL MANAGEMENT.

It is gratifying to learn from the last annual report of the Adelaide Hospital that "one of the most serious and lasting episodes—extending over five years—in the history of this or any other hospital was terminated." A dispute, which arose from an apparently trifling cause, and ended in the disorganisation of the medical school, in the withdrawal of the members of the honorary medical staff of the Adelaide Hospital, in the acceptance of office by two medical men from England in defiance of the representations of the South Australian Branch of the British Medical Association, and the ultimate expulsion of these two gentlemen from the British Medical Association, may well be characterised by the terms of the committee's report.

Still more recently we have had the spectacle of the unfortunate dispute at the Women's Hospital in Melbourne, a dispute which can hardly yet be considered as satisfactorily settled. Unfortunately, such disputes are not confined to Australia: We have before us the disturbance at the National Hospital, Queen's Square, London, which had been brewing for some years, and which culminated in open rebellion last year. These are the most prominent and striking illustrations in recent years of the serious results which may ensue from some defect in the constitution of hospital committees of management, and we may say that in each case the disturbance arose from a failure to recognise that, so far as matters bearing directly on the treatment of the patients are concerned, the opinion of the honorary medical staff should be paramount. It is true that medical men are, as a rule, bad business

men; speaking generally, they have had no commercial education, and on matters of finance and general management their opinions may not be of the same value as those of keen and experienced business men. But when it comes to strictly professional matters, such as dieting, sanitation, or control of infectious diseases, then we maintain that the Board of Management should be guided by the collective opinion of the members of the honorary medical staff.

In the case of the Queen's Square Hospital dispute, it was the want of due representation of the medical staff on the Board of Management, and undue interference by the Secretary-Director—a layman—in matters strictly medical, which rendered the position at last intolerable, and led to a crisis which has happily resulted in an amicable settlement of the difficulty in the only possible way. The medical staff have secured a voice in the management of the hospital, which can never be again ignored. The crisis at the Women's Hospital in Melbourne arose in much the same way. The opinion of the medical staff on a purely professional question was ignored by the lay members of the committee, who were in a large majority. Can we wonder that such a flouting of the opinion of the medical staff has resulted in a temporary imbroglio? It is pretty certain, also, that the Adelaide Hospital dispute would never have been so prolonged, or assumed so serious an aspect, had the opinions of the medical staff received due weight and consideration at the hands of the Board of Management.

In the large metropolitan hospitals it is customary for the medical staffs to select one or two of their number to represent them on the Board of Directors, and to be the medium of communication of the consensus of opinion of the staff on professional matters. But in the small country hospitals, we understand, the medical officers have no *ex officio* representative, though they may be elected in the ordinary way as representatives of the subscribers. This is,

obviously, an anomalous state of affairs, and one that will sooner or later lead to serious trouble. If we would profit by the experience of others, and avoid these unhappy disputes, it is clear we must insist upon adequate *ex officio* representation of the honorary medical staffs on the Boards of Management, and due deference to the consensus of opinion of the medical staffs on all matters of strictly professional import.

THE DEATH RATE FROM CANCER.

DR. CLAUD MUIRHEAD, the Chief Medical Officer of the Scottish Widows' Fund and Life Assurance Society, has recently published a report on the causes of death among the assured in this Society during the 20 years from 1874 to 1894. This report, based upon most minute and careful scrutiny of the proposal forms and death certificates, contains a large amount of information bearing upon the variations in the rate of death from different diseases. Naturally we turn with special interest to those pages of the report dealing with such diseases as cancer, pulmonary tuberculosis, etc., with a view of ascertaining how far these statistics support the general belief in the heredity of these diseases, and in their respective relative increase and decrease.

Taking the figures dealing with cancer, we find that during the seven years from 1874 to 1880, 122 members died from this disease, a number equivalent to 4.935 per cent. of the septennial mortality. Twelve of these stated in their proposal forms that either father or mother had died from cancerous disease. From 1881 to 1887, 165 members died from cancer, equivalent to 5.440 per cent. of the septennial mortality. Ten stated that either father or mother had died from cancer. From 1888 to 1894, 252 deaths were attributed to this cause, equivalent to 6.889 per cent. of

the septennial mortality. Twenty of these admitted a family history of cancerous affections at the date of assurance.

The apparent increase in the death rate from cancer has been attributed by Drs. OGLE and TATHAM to improved diagnosis and more careful statement of the cause of death on the part of medical men, rather than to a real increase in the number of deaths from this disease. If this were so, we should expect to find that the deaths attributed to cancer of the internal organs would show a large increase relative to those attributed to external cancers. But what do we find in Dr. MUIRHEAD's report? That the deaths from cancer of the internal organs amounted to 71.05 per cent. of the total specified cases in the first septennium, and to 65.58 per cent. in the third septennium, equal to a decrease of 7.70 per cent. of the percentage value of the first; while the deaths from external cancer in the first septennium were 28.95 per cent. of the specified cases, and 34.42 per cent. in the third septennium, equal to an increase of 18.89 per cent. on the percentage value of the first. We should have expected the reverse of these figures if the increase in the death rate from cancer were apparent only, and to be explained to any extent on Dr. OGLE's theory.

But not only has the death rate from cancer increased to a large extent, but the age at death of those who have died from this disease has been declining. Thus during the 20 years under consideration the increase in the rate of mortality from cancer of members under 55 years was 76 per cent.; while the increase in the rate of fatal cases of cancer between 55 and 75 years of age was only 5 per cent.

Reviewing these data, Dr. MUIRHEAD considers the following conclusions to be justified: "1. The registered increase in the number of deaths from cancer is undoubted. 2. After allowing that this increase is not wholly real, but may be accounted for to some extent on the assumption that the true nature of obscure

cases of malignant disease has been recognised with ever-increasing certainty in recent years, and that, as a consequence, the statement of death has been made with greater precision than had been formerly the case, there remains a large real increase to account for the large and progressive mortality from this disease.

3. The age period at which death from cancer is most frequent is gradually declining. 4. The average age at death from cancer among the members of the Scottish Widows' Fund declined by two years from 1874-80 to 1888-94, as contrasted with a rise in the average age at death from all causes of a little over two years."

These considerations afford ample justification for the widespread interest at present being taken in the etiology of cancer, and for the large amount of time and money which is being expended in the attempt to solve the mystery of this disease. It would be interesting if we had similar reliable data furnished by the large insurance societies of Australia, so that we might compare the relative mortality rates from cancer under different conditions of climate and civilisation. But to be of use, such statistics must be based on careful and accurate records of the members' family and personal histories, and certified causes of death.

THE MONTH.

The Friendly Societies and the A.N.A.

At the quarterly meeting of the Friendly Societies' Association of New South Wales, on September 26th, a long discussion took place in reference to the reply of the A. N. Association to the communication of the secretary of the Friendly Societies' Association, which conveyed the following resolution:—"That the A.N.A. be requested to retire from the association, their aims and objects being regarded as inimical to the best interests of the Friendly Society movement." The meeting resolved that the decision arrived at on June 27 should be adhered to. We understand that similar action is being taken by the Board of the Balmain United Friendly Societies' Dispensary. We would again impress upon our readers that *no agreement whatsoever* has been made between

the New South Wales Branch of the British Medical Association and the Australian Natives' Association.

Sydney District Nursing Association.

At the annual meeting of the Sydney Church of England District Nursing Association, held last month, the hon. secretary (Miss M. A. Carter) read the report for the year ended September 26. It stated that the first important event of the year in connection with the association had been the appointment of a second nurse, Mrs. Pilkington, who had been working since November in the parishes of St. Philip's, Holy Trinity and Miller's Point. The diseases treated by the nurses included phthisis, cancer, chronic rheumatism and paralysis. Generous help was acknowledged in direct gifts, and by means of drawing-rooms, entertainments, a ping-pong tournament, and a lecture, and the association had been enabled to do a great amount of work. Dr. G. E. Rundle (hon. treasurer) made his statement, showing that the association had about £100 in hand.

"At Home" at the Sydney Hospital.

The matron and nursing staff gave an "at home" at the Sydney Hospital on September 18th last in commemoration of the opening of the additions to the Nightingale wing. There was a very large attendance. The visitors on arrival were received by the president (Sir Arthur Renwick), Miss Rose Creal (matron), and the members of the nursing staff. They were then conducted over the whole of the wing, including the recent additions, by the members of the nursing staff. Two large marquees had been erected on the tennis lawn, in one of which a concert was held, and in the other refreshments were served. The grounds near the marquees were brilliantly lighted with electric light. The decorations, which were the work of Miss Bannan and assistants, were very pretty. Special interest was taken in the operating theatre.

Proposed Reduction of Hospital Subsidies in Queensland.

In consequence of the financial position in Queensland, the State Government propose to reduce the subsidies usually granted to the hospitals from £2 to £1 10s. On October 1st a deputation, comprising a large number of members of Parliament, waited on the Premier and Home Secretary to urge that the hospital endowment should not be reduced as proposed by the Government. The deputation pointed out that the country hospitals would be seriously affected by the reduction of the endowment, and that some of them would

probably have to close. The Premier, in reply, pointed out that the Government were much in the same position as the hospitals, their revenue being reduced in every shape. He was very sorry that they had to make the reduction, but if the drought continued the Government would have to get even more relief.

Tubercular Disease in Asylums.

It has long been known that tuberculosis is more frequently found in persons detained in lunatic asylums than amongst the general population, and as this disease is now admitted to be contagious, the need of taking prompt measures for the prevention of its extension to healthy persons, and for the treatment of those already infected, has become an urgent duty. Dr. J. V. McCreery, the Inspector of Lunatic Asylums in Victoria, proposes to submit a scheme for removing such cases from the general asylums, and housing them in cheap temporary buildings at Sunbury. He states that measures have already been taken at the Idiot Asylum to safeguard the health of the children by giving additional air and light to the older buildings, and to segregate those suffering from acute tubercular disease; but as many of the children are suffering from this disease on admission, the difficulties of keeping it within reasonable limits are very great.

The "Drayton Grange" Inquiry.

The report of the Royal Commission appointed to inquire into and report upon the arrangements made for the transport of troops returning from service in South Africa in the "Drayton Grange" was laid on the table of the House of Representatives on October 9th. After fully describing the vessel and detailing incidents of the voyage, the Commission reports upon the medical services as follows: "Three medical officers were detailed for duty on the transport. The Imperial authorities at the base omitted to appoint a medical officer in charge of the troops, therefore the appointment lay with the officer commanding the troops, and was not made by him until after the vessel had sailed. There was consequently no organisation of the medical service before departure. Under ordinary conditions the medical staff on board the 'Drayton Grange' was ample, but with the epidemics which occurred only a careful apportionment of the work could have satisfactorily met the heavy demands on the medical officers. The medical officer in charge did not utilise the services of the other medical officers to the best advantage. Lack of concord apparently existed, and a want of acquaintance was displayed with the army medical service regulations.

Notwithstanding the arrangements early in the voyage for a rotation of work, the medical officer in charge subsequently retained the hospital duty in his own hands, the other medical officers being on duty only on alternate days as orderly medical officers of the day and attending sick parades. An arrangement which allowed the junior officers time off and kept the senior to continuous and absorbing hospital work was a reversal of the proper order, and precluded the medical officer in charge from thoroughly performing his most important functions—the inspection, observation, and control of all things relating to the health of those on board. No isolation hospital for infectious diseases was provided." The commission finds that "the responsibility for what under the circumstances was undue crowding of the vessel, for the insufficiency of hospital accommodation, and for defects in the deck sheathing, rest with the Imperial embarkation authorities in South Africa; for the non-landing of the sick, with the authorities in Western Australia; and for the failure to improve an unnecessary aggravation of undesirable conditions in the vessel, on the officer commanding the troops, and the medical officer in charge."

Proposed Amendment of the Poisons Act.

An amendment to the Poisons Act of the following nature has been brought before Parliament by Mr. R. A. Price, M.L.A.:—"That the words 'or proprietary' be inserted in section 4, subsection b, of the Consolidated Poisons Act, before the word 'medicines.'" The section will then read as follows:—"Nothing in this Act shall apply to the sale of patent or proprietary medicines."

This will mean that any so-called proprietary medicine containing any unknown quantity of poison, such as chlorodyne, rough on rats, infants' preservative containing morphia, etc., tablets containing strychnine, morphia, etc., may be sold by any person in New South Wales without license and without the present precaution of labelling the package as poisonous.

If this amendment be passed the way will be opened for all sorts of criminal or accidental poisoning; in fact, the whole aim and object of the Poisons Act will be nullified.

Sydney and Suburban Provident Medical Association.

The annual meeting of this association will be held at 121 Bathurst Street on Tuesday, October 28th, at 8.30 p.m., and a meeting of the profession at the same address at 9 p.m. the same evening, to receive the annual report of the working of the association for the past year.

BRITISH MEDICAL ASSOCIATION NEWS.

PROCEEDINGS OF AUSTRALASIAN BRANCHES.

New South Wales.

THE regular monthly meeting of the Branch was held at the Royal Society's Room on Friday, 26th September, 1902. Dr. Brady, vice-president, in the chair. There were 63 members present. Visitor—Dr. Lockhart Gibson, of Brisbane.

THE CHAIRMAN apologised for the absence of the president.

The minutes of the previous meeting were read and confirmed.

THE CHAIRMAN announced the election of Dr. McDouall, of Callan Park, and the nomination of Drs. W. G. Plummer and Grace Russell.

THE HON. SECRETARY announced that the next general meeting of the Branch would be held at Newcastle on Friday, 31st October, and that a special general meeting would be held on Friday, 10th October, in the Royal Society's Room, to discuss the scheme for compensation as drawn up by the sub-committee, also the report of the Council on the subject of insurance fees.

DR. WILKINSON read a paper on "Influenza and its Bacillus," and exhibited some microscopic specimens. (See page 512.)

DR. JAMIESON would not attempt to discuss the scientific aspect of the paper that had been read to them. He had never heard a better description of the ravages of influenza. Perhaps it would further interest the meeting were Dr. Wilkinson to suggest a more reasonable method of treatment for the disease. The paper certainly was a most excellent one.

DR. LITCHFIELD called attention to the importance of the early prostration in the diagnosis of influenza.

DR. MEGGINSON had had a case—a young man of vigorous constitution, who exhibited no signs of catarrh and yet had a temperature of 104° and 105°, which had been relieved by two or three bleedings from the nose,—and he would like to know whether a bacteriological examination might have proved the case to have been one of influenza.

DR. STACY referred to the similarity in symptoms between typhoid fever and influenza.

DR. MACPHERSON had seen numerous cases in the country of gastro-intestinal trouble, and had regarded them as cases of English cholera, but on coming to practice in Sydney he had found such to be treated as cases of influenza.

DR. BINNEY would like to know from what point of view Dr. Wilkinson thought bacteriological examination so essential; was there any specific treatment to be administered the omission of which would be of serious consequence? In his own practice it would be most impracticable. True influenza was, in his experience, a fairly definite disease. In his experience, it had been epidemic on three occasions during the last 12 months.

DR. FIASCHI said he always listened with great interest to anything that Dr. Wilkinson brought under their notice. The paper he had read was a valuable one, and it had given them a great deal of information on the subject. He had not liked the manner in which Dr. Wilkinson had referred to the profession in his paper; it was surely a strong term to apply that of "charlatan" to fellow practitioners. He would like to mention that the striking increase in late years of cases of appendicitis might be due to infection from the influenza bacillus.

What the profession really desired to learn, however, was what to do in the way of treatment for their patients suffering from influenza rather than being assured by bacteriological investigation as to the correct diagnosis of the disease.

DR. BRADY considered that a great increase in cases of middle ear trouble was observable in these days. He had an enormous number of cases of sinus of the nose of late years, and he attributed the increase of such diseases to be due probably to infection by the bacillus of influenza.

DR. WILKINSON said he would deal in the first place with Dr. Brady's criticism. In his own experience he had been surprised to find how often suppuration of the accessory sinuses of the nose might be traced to the time when influenza was proved to exist as an epidemic. The relation of influenza to pulmonary tuberculosis was an important and varied one. Influenza might light up latent tuberculosis, or might create a suitable soil in the lungs for the growth of tubercle bacilli; but apart from this, influenza might simulate pulmonary tuberculosis, and vice versa. Nothing but a careful bacteriological examination could indicate the true state, and even an injection of tuberculin might be necessary. Here he might say that if scientific methods appear to Dr. Binney to have no practical value, it might be well for him to forbear from dealing with cases of pulmonary tuberculosis or influenza, or else he must occasionally be groping in midnight darkness. Dr. Fiaschi took exception to some words he had used. His object was to correct loose language and improve the standard of diagnosis—in medicine as well as surgery. Science might save us from many guesses at truth that were very wide of the mark. With regard to the diagnosis of influenza by plate cultures, an expert could recognise influenza colonies with the naked eye and the microscope, but no one ever omitted to stain the bacillus and also control the observation by attempting to grow the influenza bacillus on agar without any admixture of blood. The only bacillus that resembled the influenza bacillus in its features was the bacillus of whooping cough; conceivably in children difficulties might sometimes arise. By the blood agar test influenza bacilli had been isolated in exudations and secretions from unusual situations. Thus Professor Kutz had recorded a case of pyelitis of this nature.

DR. MAITLAND read some notes on the following cases:

- (a) Strangulated hernia, with excision of 18 inches of gangrenous gut.
- (b) Appendicitis in a hernial sac.
- (c) A case of calculus pyo-nephrosis in a movable kidney—nephro-ureterotomy.
- (d) Removal of villous papilloma of the bladder.

(See page 521.)

DR. STEER BOWKER said he had listened with very great interest to the notes on the cases read by Dr. Maitland, particularly as he had the pleasure of seeing them prior to operation. With regard to the strangulated hernia case, there can be but little doubt that where it is possible it is the best treatment to proceed, as Dr. Maitland did, to excise the gut, keeping an end to end anastomosis, and there are but few cases where this is inadvisable for the anastomosis done by one accustomed to intestinal surgery. This does not materially prolong the operation. The question arises as to the best means of doing the anastomosis, whether by Murphy's button, Robson's bobbin, O'Hara's forceps, La Place's forceps, or simple suture. He had never had any trouble from the use of Murphy's button, and he should always prefer a button or a bobbin; by the aid of one of these the anastomosis is done so quickly that the operation is very slightly prolonged. Concerning the use of Paul's tubes, he had used them on several occasions, but in excisions of the large

intestine, and most valuable he had found them, but he should certainly hesitate in using them in a femoral hernia case. The making of a fecal fistula in the small intestine was a serious matter, and should never be done if it was possible to avoid it, as a fistula of the small intestine was very difficult afterwards to close (and the intestine in a hernia was usually the small). A fistula in the large intestine had a tendency to close, but his experience with those of the small had been the reverse, and its tendency was to remain open, he thought, on account of the contents of the large intestine not being so fluid as those of the small. He would always hesitate before making a fistula in the small gut, and would take a little extra risk to try and avoid it, for a person who has to work would almost be better dead than be left with a fecal fistula, to say nothing of what he would probably have to say about the surgeon who left him in that plight, and on whom he would put the whole blame. In the case of nephrectomy with excision of portion of the ureter having a stone impacted, he thought Dr. Maitland did the right thing, as if he had left the ureter with the stone it would without doubt have kept up a cystitis, and he thought this should certainly be done in all cases where there was any doubt about the permeability of the ureter. He had two cases at present, in each of which he opened a pyo-nephrosis and got a stone, but as they still had a serious discharge of pus, and also pain along the ureter, they probably had an impacted stone there also, and he should have to endeavour to extirpate the remains of the kidney and the ureter. This case emphasised the value of the urine segregator used in conjunction with the cystoscope. He was with Dr. Maitland when he examined the case, and saw with the cystoscope the dark pus exuding from the ureter of the unhealthy side, but could not see anything coming from the healthy side on account of the turbid medium. So this gave no evidence of the condition of the other kidney, and it was a very awkward matter to remove one kidney and hope that the other one was carrying on its function; but by means of the segregator the urine from the healthy side was collected and examined, proving the kidney to be doing its work. He was very glad to hear that Dr. Maitland drained the bladder in his case of excision of the villous growth. He thought this was of great importance, as there was a tendency for surgeons to close up the suprapubic wound, and he considered that in any operation on the bladder it was best to have for a time free drainage. He congratulated Dr. Maitland on the manner of his operation and the results attained.

In answer to Dr. Worrall, Dr. MAITLAND said that Trendelenberg's position was used after the bladder had been opened, also reflected electric light, but the bladder was too small and area of operation too deep to remove it by any other means than were adopted. In Dr. Worrall's case the growth was near the urethra, a position more easily got at than the area about the ureter. With regard to the use of Paul's tubes, suggested by Drs. MacLaurin and Hinder, Dr. Maitland thought that Dr. Bowker had answered that question for him. In the case of strangulated hernia, the question whether an end to end anastomosis should be done or an artificial anus made, to be followed by a subsequent operation, depended entirely on the condition of the patient; if the condition was good, then the ideal operation of excision of the gangrenous portion and an end to end anastomosis should be done. The actual anastomosis did not take long, only a few minutes. If the patient's condition did not warrant this being done, then Paul's tubes might be used. Dr. Bowker, who had had some considerable experience in their use, had pointed out that their use was not so satisfactory in the small intestines as in the large intestines. O'Hara's forceps had been mentioned, and it appeared to have the advantage of

keeping the intestine closed until the anastomosis was made; but on the other hand it appeared to turn in too much tissue, which might be apt to cause stricture. Murphy's button was an excellent instrument, and Czerny, Gussenbauer, and Wolfes, who four years ago had written against the button, to-day used it. It was simpler than suturing; it saved time; there was uniform coaptation of the nervous surface; it stopped hæmorrhage at the point of approximation and thus favoured primary union, and there was no needle to carry infection from within the bowel to the peritoneal cavity. Dr. MacLaurin was incorrect when he stated that the custom was, in strangulated hernia with gangrenous gut, to give relief by means of Paul's tubes. The whole trend of surgical opinion in the last few years was towards excision with anastomosis. Dr. Maitland quite agreed with Dr. Fiaschi that it was not wise to attempt to do too much when dealing with a sub-peritoneal hernia, as it was sure to lead to disaster; they were difficult cases to deal with.

Dr. W. J. Munro exhibited specimens of *Cysticercus Echinococcus Multilocularis*.

A special general meeting of the Branch was held at the Royal Society's Rooms on Friday, October 10th, 1902, Dr. G. E. Rennie (president) in the chair. There were 33 members present.

The HON. SECRETARY read the circular convening the meeting.

The PRESIDENT announced the election of the following members:—Dr. W. G. Plummer, Clarence River; Dr. Grace Russell, Women's Hospital.

The HON. SECRETARY moved the adoption of the report of the Council on the question of fees for insurance certificates.

Report of Council—1. That where certificates of health only are required for insurances under £100, the fee be 10s 6d. 2. That in every case where a schedule has to be filled in, the fee be £1 1s.

Dr. LITCHFIELD seconded the resolution, and asked whether the question relating to salaried medical officers of the various life insurance societies had been taken into account.

The HON. SECRETARY replied that at a meeting held some weeks ago only the question of fees had been raised, and the Council had only been requested to report on that.

Dr. CLARENCE READ considered the proposal of the Council hardly met the case. Many insurance societies paid a fee of half a guinea, and the form to be filled in being brief, the fee paid medical men very well. He advocated the matter being dealt with so as to create as little friction as possible, and moved an amendment.

Dr. ARTHUR seconded the amendment, arguing that should they throw down the gauntlet it might lead to undesirable results.

Dr. BINNEY did not agree altogether with the report of the Council, nor could he support Dr. Read's amendment. If the Council sought a conference with the medical officers of the different insurance companies, who are mostly members of the Branch, some settlement would probably be arrived at. It does not seem that there is likely to be any conflict between the management of the insurance companies and the medical officers; in any case they were more likely to get their rights by dealing with the companies through the medium of their medical staff.

Dr. F. W. HALL contended that most of the insurance societies would not pay a guinea fee for every examination, and that to attempt to press the matter might possibly result in Australian insurance companies following the example of some English societies, which had adopted the plan of accepting members without any medical examination whatever, protecting themselves

by clauses reducing the amounts paid should insured die shortly after effecting a policy.

Dr. SINCLAIR GILLIES was strongly in favour of the original resolution.

The HON. SECRETARY mentioned that Dr. Foreman and he had some time ago interviewed the Australian Mutual Provident authorities and found that they were quite unwilling to agree to any proposal to regulate the fee for examination in accordance with the amount insured. The American companies recognised that medical practitioners should be sufficiently remunerated for services rendered.

Dr. McPHERSON said that though some of the more recently-established societies paid a smaller fee than others, yet inasmuch as there being many more examinations for such societies they were more profitable to the profession than those paying a larger fee.

The PRESIDENT pointed out that Dr. Clarence Read could not move an amendment, but could move that the report be referred back to the Council for further consideration.

Dr. CLARENCE READ withdrew his amendment accordingly, and it was agreed to leave the matter in the hands of the Council for further consideration.

Dr. FURNIVAL moved the following resolutions:—

1. That a fund be formed to be known as the "New South Wales Lodge Practitioners' Defence Fund."
2. That its objects be to reimburse medical men who may resign lodge appointments at the instigation of or with the approval of the New South Wales Branch of the British Medical Association.

3. That the control of the fund shall be in the hands of three trustees, who shall be elected by the members, and shall hold office for a period of three years each, a treasurer and secretary and ten councillors, who shall be elected at the annual meeting, and shall hold office for one year. All these office-bearers shall be eligible for re-election. The council shall elect its chairman from among its own members annually, or oftener should a vacancy occur.

4. That the fund shall be raised by annual subscriptions of 21s and upwards, and donations.

5. Any medical man desiring assistance from this fund shall make application to the council of the local branch of the British Medical Association, and on their recommendation the committee of this fund shall investigate the case, and decide on the amount of assistance to be granted. In the general interests of the profession, and with the approval of the council of the local branch of the British Medical Association, the committee may, under special circumstances, make grants to non-subscribers.

6. The first committee, as soon as elected, shall draw up rules and regulations for the general control of the business of the fund.

Dr. THOMAS seconded the resolutions.

Drs. BINNEY, GILLIES and MCKAY discussed the resolutions.

Dr. SINCLAIR GILLIES moved as an amendment—"That a circular be sent to all members of the Branch and members of the profession who are eligible for membership of the Branch embodying these resolutions, and asking for an expression of opinion on the question of starting such a fund, and also as to whether they are prepared to become subscribers."

Dr. CLARENCE READ seconded the amendment, which was carried.

The meeting at Newcastle.—The next meeting of the Branch will be held at Newcastle on October 31st, at 8.30 p.m. Members will leave Sydney by the 5.10 p.m. train, and will be entertained at supper at the close of the meeting. Return by steamer leaving at 11.30 p.m.

Council Meeting.

The Council met at the Association Rooms on Friday evening, October 3rd, 1902, at 8.30 p.m. Present: Drs. Rennie, Crago, Hankins, Worrall, Fiaschi, Jamieson and Dick.

The minutes of the previous meeting were read and confirmed.

The following members were elected: Dr. Plummer and Dr. Grace Russell.

Dr. Crago was reappointed representative of the Council on the Sydney and Suburban Provident Medical Association for 1902-3.

Letter read from Grand United Order of Oddfellows inquiring if the B.M.A. had any rules prohibiting a doctor from accepting female members at a lower rate than male members. Also hon. secretary's reply to the effect that the B.M.A. did not recognise any distinction in the matter of remuneration between male and female members of lodges.

Read letter from the chief medical adviser of the Civil Ambulance and Transport Brigade re gratuitous instruction in first aid of the injured.

Other correspondence on various ethical matters was dealt with.

South Australia.

The usual monthly meeting was held at the University at 8 p.m. on September 25th, 1902.

The President (Dr. A. A. Hamilton) was in the chair, and 27 members and one visitor were present.

The minutes of the last meeting were taken as read and signed.

Dr. J. A. G. HAMILTON showed a uterus which he had removed by vaginal hysterectomy from a woman aged 45. Menses regular but profuse, with metrorrhagia. Six months ago the uterus was curetted, and a quantity of papillomatous growths removed. Curetted again ten days ago and same character of growths removed, but not the usual soft velvety papilloma, but firm hard growths like small pellets. A microscopic examination only showed papilloma. Despite the negative result it was thought wiser to remove the uterus, as her symptoms and character of the growths pointed to some malignant growth. On opening the uterus after removal the left cornu was found to be invaded to a depth of $\frac{1}{4}$ in. by a malignant growth, probably a malignant adenoma. The result justified its extirpation. If it had been left much longer it would probably soon have invaded neighbouring organs.

Dr. POULTON showed specimen of carcinoma of rectum which he removed after a preliminary colotomy. The removal was effected from below, upwards to junction with sigmoid, and included glands in the attached meso-rectum.

Drs. R. H. MARTEN and H. SIMPSON NEWLAND showed the following specimens:—

1. A vermiform appendix successfully removed from a male aged 26. It measured only half an inch, and the extremity, instead of being rounded, tapered off into fibrous tissue. The patient had suffered from two attacks of appendicitis. An abscess formed during the first attack and ruptured into the bowel. Possibly this had led to the destruction of the distal end of the appendix.

2. A piece of omentum which had formed the contents of a strangulated left inguinal hernia in a man aged 78. He had long suffered from bilateral inguinal herniæ. The specimen consisted of tough omentum. It was of pyriform shape, and the size of a large walnut. The interest of the specimen lay in the fact that the strangulation was due to torsion of the pedicle, which lay in the

neck of the sac. It was twisted three times from left to right.

Papers were then read by Drs. Hone and H. Evans on "Acute Colitis," and a paper was read for Dr. Goldsmith, who is at present in London, on "Treatment of Tropical Dysentery." (To appear in a future issue).

On the discussion which followed nearly half of the members present took part, and it was noticed with pleasure that all the papers of the evening were not only supplied by country members of the branch, but also by former students and graduates of the Adelaide University.

Queensland.

A meeting of the Queensland Branch was held on Friday, October 3rd, Dr. Hopkins (vice-president) in the chair, and 12 members being present.

Dr. Effie Stillwell was elected a member of the Branch.

It was resolved that the Council be a sub-committee to ascertain if a more suitable room could be found for the use of the Branch.

Dr. ROBERTSON exhibited a few specimens of post-nasal adenoid hypertrophy. The growths were entire, and showed their structure and relations better than when the growths were removed with forceps or finger nail. The method he used was by the curette, and he preferred Beckmann's, as it took in the whole mass at one sweep, and in that way any unnecessary bruising or laceration of the subjacent tissue was avoided. He preferred nitrous oxide as the anæsthetic, and used it in all cases over five years of age, and frequently below that age. The first specimen was from a boy of seven. It showed the peculiar folding or lamination met with in most cases, also the so-called bursa with its free opening blocked by a granular mass the size of a pea. The second showed the same ridges and general appearances, though not so symmetrical in structure. The next one was simply a large fleshy mass, more firm in consistence, with a smooth, level surface, and no lamination. It came from a boy of nine with a marked catarrhal history.

Dr. HAWKES read a paper on "Gastro-enterostomy," which will appear in a future issue.

Drs. TAYLOR, HOPKINS and BROCKWAY spoke.

Dr. HAWKES remarked, in reply to Dr. Taylor, that he always freed the pylorus as much as possible from adhesions before joining the gut and stomach. In reply to Dr. Hopkins' query about feeding, he stated that his cases had for a few days previous to operation been kept on sterilised food, and care taken to keep the mouth and teeth as clean as possible; then, if necessary, the stomach was emptied just before the operation, and the patient fed by nutrient enemata, and rectal injections of saline for three or four days after. Liquid peptonoids was the first food given, then peptonised milk. Regarding the questions of anæsthesia raised by Drs. Brockway and Hopkins, he considered that though the method referred to by Dr. Hopkins of having a somewhat prolonged anæsthesia before commencing the operation added greatly to the convenience of the operator, yet in most cases the same result could be obtained if the anæsthetist had sufficient skill and experience in the administration of anæsthetics in abdominal cases. He held that it required the highest degree of skill in the administration of anæsthetics to thoroughly and satisfactorily anæsthetise a patient for an operation in the upper abdomen without going to the other extreme of pushing the anæsthetic to dangerous limits in order to obtain complete relaxation of the abdominal muscles; in fact, the knowledge when to utilise it or change the anæsthetic was of the highest importance in order to ensure complete relaxation. In answer to Dr. Hopkins' query

about Murphy's button, he stated that for the future he would prefer the bone bobbin. His second case passed the button on the 21st day. His first case had not passed the button when he left the hospital a month after the operation, and though directed to look for it had not yet succeeded in finding it, a fact that may possibly be accounted for by the explanation of the patient that owing to his recovered health he had been very busy and had had time to look for it only on Sundays.

THE BATTLE OF THE CLUBS.

West Australia.

THE following abstract of a letter from the secretary of the Coolgardie Medical Union, published in the *Coolgardie Miner* of September 8th, speaks for itself:—

"Some years ago, after various consultations between the friendly societies and the doctors then in Coolgardie, it was arranged that all members of friendly societies should pay a standard fee of 7s 6d per quarter for the professional attendance of the member, his wife, and family, and that no definite medical man should be appointed to any one society, as had been the previous practice, but complete liberty of choice should be left to each individual member to select his own medical man. This plan apparently worked extremely well, as each individual was at liberty to change his medical adviser at the end of the quarter. Some time ago the friendly societies began to introduce members whom, from their financial position, the medical men did not consider legitimately entitled to the benefits for which friendly societies have been established, and who elsewhere, should they desire to join for political or philanthropic reasons, are always admitted as honorary members, neither participating in the sick allowance of £1 per week during illness, nor in the medical fund benefits. The medical men determined they would admit no employer of labour to the medical benefits. So when the Mayor of Coolgardie, late attorney for the Venture and other syndicates, applied to be admitted to the medical benefits he was refused. Apparently this so incensed some of the members of the friendly societies that they determined to bring in another doctor, for a yearly salary, to bring the medical profession into subjection. Accordingly they engaged Dr. W. R. Erson, late of New Zealand, to take the position of paid medical servant to the societies. The Medical Union have determined to have nothing whatever to do with the imported doctor. They will have no professional communication with him whatsoever, nor in any way nor at any time render him any professional assistance. So that their former lodge patients and others justly entitled to medical benefits shall not be punished by the action of their leaders, the medical men are opening lists on similar terms to those prevailing previously with the friendly societies, so that those justly entitled may receive similar benefits."

Nunyarra Sanatorium, South Australia.—This institution for the open-air treatment of pulmonary phthisis has recently been opened under the medical supervision of Dr. A. H. Gault. No expense has been spared in the completion of the arrangements. Radiators and hot and cold water are supplied to each room. The scenery is magnificent, and the position, sheltered from cold winds, affords one of the most equable climates in the States. There are miles of gently sloping walks and fruit gardens. Pine plantation and numerous artistic shelter-sheds make a most attractive health resort. The sanatorium is for paying patients only.

REVIEW OF CURRENT MEDICAL LITERATURE.

OBSTETRICS AND GYNÆCOLOGY.

Repeated Rupture of the Uterus.

Kriwaki, St. Petersburg (*Monats. f. Geb. u. Gyn.*, Bb. xv., Heft. I.), reports: In a sexipara of 33, as the head did not engage, the hand introduced into the uterus to turn felt the intestines. The child was extracted after perforation of the aftercoming head, and after delivery examination detected a laceration of the cervix extending deeply into the parametric cellular tissue; the peritoneum seemed to be uninjured. There was a feverish child-bed, but no hæmorrhage. Eighteen months later induced labour, near term; occipital position. As there was ascension of the Bandl's ring, preparation was made for Cæsarean section, but in the meantime the uterus ruptured, and the posteriors of the child slipped into the abdomen. Laparotomy. The fœtus was extracted through the tear which was in the anterior wall of the cervix; owing to the extensive lesion no attempt was made to stretch the tear, but the uterus was amputated. The child, but recently dead, weighed 3000 grammes. The old tear could not be traced macroscopically nor microscopically.

Cæsarean Section for the fourth time.

Charles (*J. méd. de Bruxelles*, Feby. 6, 1902) has successfully performed Cæsarean section for the fourth time on the same patient, a little woman with a rickety pelvis and a conjugate of only 6 cm. Both mother and child are healthy. Of the three children previously delivered in the same way, two are alive and well; the third died of bronchitis at the age of 13 months.

Quinine in Pregnancy complicated with Malaria.

A. Maggi (*La Clinica Obstetrica*, April, 1902).—Twenty cases are recorded in which quinine was given freely for malaria in pregnant women without in any instance producing abortion. Maggi dwells on the dangers of not giving quinine in such cases; and he cites one instance in which fetal death and abortion at the sixth month occurred, presumably from malaria, the medical attendant having been afraid to use quinine. In the cases in which quinine was given the infants were healthy and robust. The drug was administered by intra-muscular injection in the form of bichloride. Instead of producing abortion, the quinine in these cases prevents it, and also saves the patient from the cachexia and anæmia of malaria.

Hysterectomy in the Treatment of Puerperal Sepsis.

Osterloeh (*Münchener med. Wchns.*, 1902, No. 21), in the course of a communication to the Society for Natural Science and Hygiene, Dresden, said: Hysterectomy in the treatment of puerperal fever is a subject which was brought forward in 1886 by B. G. Schultze, who laid down the indications for this procedure as follows:—(1) There must be present in the uterus an active source of infection which cannot be successfully dealt with through the genital canal. (2) There must be no imminent source of infection elsewhere than in the uterus. (3) The existence of foci of septic infection such as thromboes or emboli, already deposited more centrally, should be improbable.

Döderlein (*Ther. Monatsh.*, 1899, S. 693) also considers that in certain rare cases of infection of unusual

type the total extirpation of the infected uterus is justified and successful, but is quite aware of the difficulty of laying down precise indications. Of two cases successfully so treated by himself, he admits that he cannot be sure that he would have lost these patients without operation.

Bumm (*Centralb. f. Gyn.*, 1902, No. 8), who has performed total extirpation of the septic uterus in five cases with three deaths, considers that the operation is only likely to be successful in case of injury that has happened during the induction of abortion or during labour, owing to its leaving clean wounded surfaces, or in case of deeply penetrating uterine gangrene, such as is caused by necrotic myomata, protracted retention of fetal parts, or large pieces of the placenta. In septic peritonitis it has no chance of success unless the foci of pus are encapsuled. Phlegmon of the parametrium should not, he thinks, be cut unless there is a large and accessible abscess cavity.

Everything yet published points to the difficulty of defining the indications for the operation; the number of cases for which it is suitable seems to be very limited, and the prospect of success very doubtful. Of course, that prospect is better when the operation is undertaken in time (before the formation of secondary foci of infection), but here the objection can always be raised that septic infection confined to the uterus can be cured without any radical surgical treatment; indeed, we see not a few cases recover in which the infection has spread to various other organs.

On the Etiology of Placental Cysts.

Vasmer (*Archiv. f. Gyn.*, Bd. lxxvi., Heft. I.) found in a mature placenta six larger and numerous microscopical cysts, all lying beneath the amnion and membrana chorii, the largest of the volume of 150 cm. He was able to demonstrate that they owed their origin to an abnormal proliferation of Langshan's layer of cells and the secondary degeneration of the proliferated cells.

Hysteropexy.

Bland-Sutton (*Polyclinic*, 1902, June) supports the thesis that the proper treatment of inveterate retroversion of the uterus is hysteropexy. This operation, he maintains, replaces the uterus in its natural position, and so far from preventing pregnancy facilitates the development of that condition, which in itself is one of the most successful methods of overcoming chronic retroversion of the uterus. He admits that there are cases of retroversion without symptoms, and explains that in these the distortion of the uterus is unaccompanied by any displacement of the ovaries. When, on the other hand, pain and other pelvic disturbances are present, these are evidences that one or both ovaries are dislocated from their normal position. In some cases the displacement of an enlarged ovary is the primary event, and the retroversion of the uterus is a consequence of this, whilst in others the ovary is dragged downwards by the abnormally situated uterus. As a consequence of these displacements, the softened uterus of a multipara may be altered in shape and may contract adhesions to neighbouring parts, and as a result of obstruction to the circulation the ovary may become oedematous or its capsule be thickened from the pressure of the uterus. The use of pessaries he considers useless or even harmful.

Dermoid Cysts Perforating the Bladder.

Muench (*Leits. f. Heilk.*, Bd. xviii., Heft. I.) has found 24 recorded cases of the perforation of the bladder by dermoid cysts, and reports an instance of such. The woman was 51 years old; she had no alarming

symptoms and no diagnosis had been made. She died the following day, and at the autopsy a papillomatous growth from a dermoid cyst of the left ovary was found to have forced its way into the bladder.

Kraurosis Vulvæ.

Rosenstein, Königsberg (*Monats. f. Geb. n. Gyn.*, Bd. xv., Heft. 2) met with an instance of this disease in a maiden of 18; it had commenced in her sixth year. Excision of the diseased parts was successful. Microscopical examination showed that there is in this affection chronic inflammatory oedema of the whole skin and subcutaneous connective tissue, pronounced cornification of many layers of epithelium, and an atrophic loss of the mucous layer of the epidermis of the papillary bodies, and of the elastic fibres in the papillary layer of the corium.

The Treatment of Pelvic Inflammations.

Bedford Fenwick (*Med. Times*, 1902, June 28) points out that in a very large number of instances of pelvic inflammation we must adopt medical treatment—in some because it gives such great and permanent relief, in others because patients absolutely decline any operative procedure. Formerly these patients went from bad to worse; more recently they have been slowly relieved by local and general remedies—by mercury internally and by inunction, by hot douches and glycerine plugs; but such treatment was necessarily prolonged for many weeks or months. During the last two years he had been using ichthyol in the treatment of pelvic inflammation. He employed it at first in the form of ointments externally and applied on plugs to the cervix, with varied effects; latterly in pessaries in combination with glycerine applied night and morning, with marked success. Rest in bed is essential, not only to keep the application in constant apposition to the vaginal vault, but to give that mental and bodily repose which is nature's best assistant. The first object is secured by a wool tampon. A hot antiseptic douche after the removal of the plug not only removes the remains of the pessary, and so prevents decomposition, but by its action on the vessels promotes absorption of the drug, a fresh pessary being inserted directly after the douche. Most of the patients suffer more or less from diarrhoea, which may be due to the sulphur contained in the ichthyol, but which no doubt assists in the rapid absorption of the inflammatory products. When constipation is present it is well to give a brisk purgative such as sulphate of soda, combined in anæmic cases with sulphate of iron.

Uterine Cancer.

Lewers (*Practitioner*, June, 1902) points out that when cancer of the uterus was considered to be a hopeless and uniformly fatal disease, practitioners were loth to suspect its existence, or suspecting it to insist on examination, believing that no great harm could be done by postponing the certain diagnosis of a condition for which practically nothing could be done. We now know that a fair proportion of sufferers may be permanently relieved if the disease be recognised in an early stage. But women regard pain as a necessary accompaniment of cancer, and pain is, as a rule, a late symptom in cancer of the cervix, and not an early one in cancer of the body of the uterus; wasting and cachexia also are symptoms of an advanced stage of the disease.

If the disease has extended beyond the anatomical limits of the uterus in any direction, radical operation in his opinion offers no chance of permanent cure, and very rarely of any considerable relief. Some of his most satisfactory results as regards freedom from recurrence were after supra-vaginal amputation. But that

operation was often followed by obstructive dysmenorrhœa, sometimes severe, and once leading to hæmatometra and hæmatosalpinx. The lessened mortality of vaginal hysterectomy has led him now to treat almost all cases of cervical cancer suitable for radical operation by that method rather than by supra-vaginal amputation.

Haultain (*ibid.*) estimates that only about 20 per cent. of the cases of malignant disease of the cervix, but the bulk of those of similar disease of the body, are seen in time for radical treatment to offer some hope of cure. In the former class (95 per cent. of all malignant uterine disease) no suspicious bleeding occurs till ulceration takes place and pain is seldom felt till neighbouring sensitive structures are involved; leucorrhœa, unless unduly aggravated, seldom causes the patient to seek medical advice. The character of the bleeding is all important; sometimes distinctly menorrhagic, it is often intramenstrual or post-coital; the renewal of hæmorrhage after the menopause is due to malignant disease in 95 per cent. of all instances.

Cervical Cancer is almost entirely confined to women who have borne children. Pain, at the best, is a late symptom, is most indefinite; in some cases entirely absent, in others causing inscrutable agony. Cachexia is also a late symptom. Clinical evidence alone is insufficient; the aid of the microscope is indispensable. From the clinical side the most important signs are the friability of the diseased tissue and free hæmorrhage on gentle touch; but it must not be forgotten that an apparently healthy os externum may be present with advanced malignant disease of the cervical canal, and that examination with the sound, or better with the finger, may be necessary to elicit such hæmorrhage. The disease is curable if treated early enough. Suspicious bleeding should lead to examination; friability and hæmorrhage on touch to an expert's report or consultation with a specialist.

Cancer of the body attacks alike those women who have and who have not borne children. Its symptoms, early and profuse menorrhagia, followed by metrorrhagia, free leucorrhœal discharge and enlargement of the uterus, are more definite than those of cervical cancer. From sub-involution and fibro-myoma it may be differentiated by the curette and microscope, or better by dilatation by tents and digital examination of the cavity.

Sarcoma of the body of the uterus is still rarer. It may arise from the connective tissue of the uterine or cervical mucosa, or of the uterine wall, or from sarcomatous degeneration of a pre-existing interstitial fibro-myoma. It is met with most frequently between 50 and 60, though many cases occur between the ages of 5 and 20 years. When encapsuled it has probably arisen from pre-existing fibro-myoma.

Sarcoma of the cervix do not invade the body, are generally pedunculated, sometimes projecting into the vagina, and not so friable as carcinoma or epithelioma. Pain is more marked in sarcoma than in carcinoma; profuse watery discharge with enlargement of the uterus should suggest it, but the diagnosis depends on the microscope. The disease is generally confined to the uterus; metastases are later, and the prognosis more hopeful than in carcinoma.

NEUROLOGY AND PSYCHIATRY.

Syringomyelia, its Pathogenesis.

Westphal (*Centralblatt für Nervenheilkunde*, 1902, No. 150) gives an account of two cases of Syringomyelia. They are chiefly of interest from the post-mortem observations.

The first case was that of a woman who, three years before death, during a drunken bout, sprang out of a second storey window, fracturing two bones of the left leg.

For about a year before her death she suffered from intense headache and giddiness. During the attacks of giddiness she repeatedly fell forward, injuring her head. Three days before her death she fell and injured her head so severely that she remained partly unconscious till her death. Ever since the fall from the window the patient had suffered from pains in the legs and burning in the heels. For three months before her death she suffered from double vision. The muscular power and capacity for movement were unimpaired. No test of sensations could be carried out on account of the mental condition of the patient.

The post-mortem examination revealed pachymeningitis interna hæmorrhagica, partly old and partly recent; fresh hæmorrhages into the pons in neighbourhood of old degeneration centres, dilatation of the central canal from the cervical to the lumbar region, and chronic interstitial nephritis.

Microscopic sections showed that the enlargement of the central canal was due to a breaking-down of organised tissue in the canal. This organised tissue was undoubtedly the sequel of a hæmorrhage into the canal, as was proved by the inclusion in the tissue of old blood pigment; also by the fact that in other parts of the nervous system all stages of change from blood to similar organised tissue were seen.

The author ascribes the first fall from the window as the cause of a hæmorrhage into the canal, and the later slighter injuries as the causes of smaller bleedings into the pons and elsewhere.

It is a fact that cysts form in such hæmatomata, but it is a question whether such hæmatomata can become gradually organised and then completely disappear, i.e., form one large cyst. The author claims that his specimens show that this is possible, and that this is the origin of many syringomyelias.

The second case which he described concerned a syphilitic woman suffering from chronic interstitial nephritis. There was present an atrophy of the left arm with partial anesthesia. The post-mortem examination showed interstitial nephritis, pachymeningitis hæmorrhagica, syringomyelia of the cervical and dorsal cord, and in the lumbar cord obvious hæmorrhagic discoloration of the right posterior horn. The microscopic sections showed that in this case also the cavity in the cord was the result of a destruction of originally partially organised tissue. In the grey matter of the right posterior horn in the sacral and lumbar regions was a long patch of softening which was clearly the result of a hæmorrhage along a vessel. At the upper extremity of this patch of softening was a patch of organised tissue similar in all respects to that near the central canal.

In conclusion, the author asserts that his results are in harmony with those of many other investigators, and considers the case fairly proven that many syringomyelias have their origin in hæmorrhage into the central canal.

Cortical Visual Centre.

Hitzig (*Neurologisches Centralblatt*, No. 10, 1902) gives the following as some of his conclusions after extirpating the visual cortex in a number of dogs. After one-sided extirpation he finds that—

The disturbance of vision produced by the operation after a time passes completely off.

If now, in an animal so operated on, and which has recovered as above described, the visual cortex from the opposite side be removed the disturbance of vision in the first injured eye is again produced, and is even greater than the loss of vision in the eye now for the first time damaged. Occasionally it was noticed that the disturbance

of vision in the eye on the side last operated on—that is, in the eye corresponding to the first operation—was a gradually increasing one, so that the sight in this eye was markedly worse on the third day than on the second day after the operation.

He further finds that after a time, even after extirpation of the visual cortex on both sides, the animals completely regain their sight.

Hitzig points out that these conclusions disprove Munk's teaching that each element in the retina is directly connected with a definite element in the cortex.

Scar Epilepsy.

F. Krause (*Centralblatt für Nervenheilkunde*, 1902, No. 149) describes an interesting case of scar epilepsy. The patient was a man 48 years of age, whose grandmother died insane. He was quite healthy till Easter, 1897, when he fell and cut himself severely over the left supraorbital margin. The wound healed in a few days, but he began to suffer from neuralgic pains—at first in the region of the left supraorbital region, and later also in the infraorbital region, and finally over the whole trigeminal region.

On account of this neuralgia he underwent three operations. First the infraorbital was resected, then the second division of the fifth. After the second operation the pain disappeared, but the patient suffered in a short time from epileptic attacks. The third operation was resection of the third branch of the fifth, but this had no favourable result. The patient became so depressed with the pain (which had returned), and by the fits, that he attempted suicide.

It was then found that pressure on the scar of the original injury determined a fit. Excision of the scar was attempted, but it was so deep and adherent that a fresh scar was the only result.

It was then determined to remove the Gasserian ganglion, in the hope of removing the conducting path of the irritation. This was done (the operator had already done 35 such extirpations), with the result that complete loss of pain and of fits ensued.

Jacksonian Epilepsy.

The previous writer, in the same paper, described a case interesting in that it shows that the condition of Jacksonian Epilepsy may be removed even after a long period of time.

The operation was done on a girl of 16, who had had fits since four years of age. The attacks always commenced in the left hand. As she grew older the fits became more and more frequent, and latterly were accompanied by emissions of urine and feces.

Trephining was done over the arm area, and when the exact cortical area for the hand had been determined electrically, an incision was made, and a small cyst discovered. This was opened up, with the result that beyond a few fits, which immediately followed the operation, the patient has been free from them, and from any associated troubles ever since—a period, that is, of some nine years duration.

OPHTHALMOLOGY.

Kinescopy, a New Method of Testing the Refraction of the Eye.

Holth (Christiana), (*Annales d'Oculistique*, April, 1902). Holth accidentally stumbled on the fact that when a distant object is looked at and the eye obscured by winking or by interposing a card, the object remains stationary if the eye be emmetropic, but if ametropic it undergoes an apparent displacement. In myopia, or in amyopic meridian in astigmatism, the card appears to push the object before it; in hypermetropia, or in a

hypermetropic meridian, the apparent movement is in the opposite direction. Working on this phenomenon he has constructed an instrument called a kinesiometer for estimating refractions. It consists of two concentric metal rings. The outer is graduated to show the meridians; the inner, which moves on the outer, carries a transverse bar, to the centre of which is fixed a cylinder with a stenopaic slit, the axis of the slit being at right angles to the bar. The bar is fixed to the inner ring in such a way that a to and fro movement of bar and cylinder with slit is permitted to the extent of 3 mm. in the long axis of the bar, i.e., at right angles to the slit. The patient looks through the slit at the fixation object (a white disc, 5 to 10 c.m. in diameter, on a black background, at 6 metres distance). To the emmetrope there is no apparent movement of the object when the travelling slit is moved. The myope sees it apparently move in the same direction; the hypermetrope in the opposite direction to that of the travelling slit. The principal axes in astigmatism are easily found, for it is only when the slit-bearing bar is in one of these meridians that the apparent movement of the fixation object is simple. In all others it forms an angle with the line of movement of the slit. Correcting glasses are placed in a trial frame until the absence of movement indicates that correction has been obtained. The method is said to give very accurate results. Its chief defect is that it requires considerable intelligence and accuracy on the part of the patient. It is especially valuable in cases where the usual acuteness is low, as in haziness of the media, where retinoscopy or other objective tests would be difficult or impossible. Holth finds the method most satisfactory in the absence of a mydriatic, and prefers not to have the accommodation interfered with.

Full Correction of Myopia.

At the Heidelberg Ophthalmological Society's Congress in August papers were read by Pfalz, of Dusseldorf, and L. Heine, of Breslau, emphasizing the advisability of fully correcting myopia, as advocated long ago by Förster. Heine pointed out that for distance there is no argument to show that full correction can be other than beneficial, and for near objects harm could only be done by (1) dragging through ciliary contraction and (2) increased intraocular pressure. As regards the first, it has been shown that the ciliary drag affects only the anterior segment of the globe, whilst it is known that in myopia the distension is confined to the posterior segment. On the other hand, it is generally admitted that the pressure of the external enveloping muscles that occurs in looking at near objects does increase the distension in an antero-posterior direction. It is probable, further, that eyes made to use the amount of accommodation corresponding to the degree of convergence are working under more perfect physiological conditions than eyes in which their normal relation is disturbed. With regard to the second possible objection to fully correcting, the correctness of Helmholtz's theory of accommodation disposes of all theories that assume an increase in intraocular pressure, even if it had not been experimentally proved that no rise of pressure occurs during accommodation. In the discussion that followed, all the speakers (14) but one were strongly in favour of full correction, Uthoff alone saying that he had not quite made up his mind on the subject.

Compulsory Notification of Ophthalmia.

Some two or three years ago the New South Wales Branch of the British Medical Association forwarded to the Board of Health a resolution unanimously passed by the Branch that ophthalmia neonatorum should be

included in the list of notifiable diseases, as is the practice in Germany and some other parts of the Continent, and in most of the American States. The Board of Health took no action in the matter. At the May meeting of the French Ophthalmological Society, Trousseau urged the necessity for compulsory notification of this disease to diminish the incidence of blindness. The Boards of Health of both City and State of New York have gone one better in placing all cases of ophthalmia, both acute and chronic, on the list of contagious and compulsorily notifiable diseases. Let us hope that the New South Wales Board of Health, fairly abreast of the times in most matters of public health, and all the Australian health boards will soon come up to date in regard to this dread disease, which contributes so largely to the filling of our blind asylums, causes a vast amount of misery and suffering, and considerably impoverishes the community.

The Treatment of Corneal Ulcerations by Sub-conjunctival Injections.

John Dunn, of Richmond, Va. (*Knapp's Archives*, May, 1902). The writer is a strong advocate of this method in suitable cases, viz., infective or spreading ulcers, with a relatively healthy condition of the conjunctiva. When the bulbar conjunctiva is greatly congested, and in consequence the free corneo-conjunctival circulation interfered with, he does not expect benefit from the method, but has recourse to the cautery. He attaches little importance to the two objections to the use of these injections, viz., the pain that for a short time follows the operation, and the inflammatory adhesions between conjunctiva and sub-conjunctival tissues that takes place as a result of the injections. These he considers trivial in comparison with the object to be gained, viz., the healing of the ulcer. He uses two of the many preparations suggested by different writers: cyanide of mercury, 1-3000, and iodine-iodide of potash solution; metallic iodine, gr. 1-5; iodide of potash, gr. 15; distilled water, one ounce. He prefers the latter solution, and injects 10 or 12 drops with an ordinary hypodermic syringe after cocaineising the conjunctiva.

A Case of Trachoma treated by X-rays.

As was only to be expected, this method has been tried for the curing of trachoma. At the June meeting, of the Ophthalmological Society of the United Kingdom, Mr. Stephen Mayon exhibited a patient, aged 14, who had been treated by X-rays for trachoma, of five years standing, with one cicatricial band and dense pannus. The upper lid was covered, and the lower pushed up so as to cover the cornea. Exposures, 22 in all, of three minutes duration, with a four ampere current, at a distance of 9 in. were given. In seven weeks the patient was discharged cured. All the granules had disappeared; the cornea was practically clear, except at the upper part where the pannus was densest; no trace of the previously existing ulcer remained. The other eye, treated with copper sulphate, had not improved to nearly the same extent.

A correspondent has sent us the following extract:—"Sydney Gazette, April 11th, 1818.—An extraordinary event has taken place in Florence. A woman died after being 19 months pregnant. It was discovered that the child had been dead ten months. It was not in the uterus, but was the result of an extraordinary conception, which had taken place in a species of tumour occupying the centre of the hypogastric region. The child was found in a natural position, but some parts of its hands and feet were materially changed from a healthy state."

CORRESPONDENCE.

London.

(FROM OUR OWN CORRESPONDENT.)

The Illness of the King—The Coronation Honours—The Annual Meeting of the British Medical Association at Manchester.

THE tragic suddenness with which the King was stricken down by illness on the very eve of his Coronation created in London, and indeed all over the country, a degree of consternation which has probably never been equalled by any event in history. Elaborate preparations had been in progress for months to fittingly celebrate the great and historic event, and every detail of the imposing pageant in which his Majesty was to play the leading part had been rehearsed until it was believed to be perfect. The city of London had become transformed; along the length of the route which the Royal procession was intended to traverse an elaborate plan of street decoration had obliterated the gloomy and unprepossessing outlines of irregular and smoke-begrimed buildings, and by means of banners, shields, flowers, and bright draperies, had produced an effect which, if not beautiful, was at least pleasing to the eye and satisfying to the spirit of rejoicing with which the air was filled. Everything portended a great and successful festival, but at the eleventh hour the universal note of gladness and joy became suddenly transformed into a no less universal note of sorrow and anxiety when it became known that the King was so seriously ill that an operation had become an imperative and immediate necessity, and that therefore the ceremony to which the whole Empire had been looking forward with such eager hopefulness must be postponed. A greater than King Edward himself had spoken, and His command must be obeyed. On receipt of the news the people stood aghast, but when the first shock of surprise was over the inevitable was accepted with stoical resignation, and all sense of personal disappointment was speedily swallowed up in an intense anxiety for the welfare of the august sufferer, and in a fervent prayer that he would escape the perils by which he found himself so unexpectedly surrounded and ultimately be restored to perfect health.

It soon became known that the King was suffering from perityphlitis, and almost before the news got disseminated a further official statement was issued from Buckingham Palace announcing that an abdominal operation had been successfully performed and that a large abscess had been found and evacuated.

It is difficult to account for the occurrence of such an illness, and the question naturally arises whether it could in any way be related to the attack of enteric fever from which his Majesty nearly lost his life 30 years ago. In this disease ulceration of the bowel is always most pronounced in the neighbourhood of the ileo-cæcal valve, and such ulceration, assuming it to have existed, might conceivably enough have given rise to adhesions and ultimate torsion in the region of the appendix sufficient to at least create a predisposition to the occurrence of inflammatory disturbance under favourable exciting conditions. Such conditions would be readily supplied by the great fatigue which previous weeks of very hard work must have produced, and by the digestive disturbance which is so liable to accompany such a state of exhausted general health. The illness would seem to have dated from ten days before the operation, and was at first ascribed to an attack of lumbago.

On June 14th his Majesty first complained of discomfort, which, however, was slight, and did not interfere

with his proceeding to Aldershot in accordance with his previously arranged plans. At midnight of the same day the discomfort became increased, and took the form of abdominal pain. Sir Francis Laking was summoned, and succeeded in relieving the more urgent symptoms. Next forenoon Sir Thomas Barlow joined Sir Francis Laking in consultation; but even then, though the symptoms were suggestive of the possibility of inflammatory mischief, no definite diagnosis could be arrived at. That afternoon the King experienced a sharp rigor, and in the light of the subsequent history we may conclude that this was coincident with the first formation of pus. During the next two days the inflammation probably extended, and set up an adhesive peritonitis. On June 16th he was much relieved of pain, and had sufficiently recovered to be able to drive to Windsor; but on Wednesday, the 18th, the combination of pyrexia, with the presence of an ill-defined, tender, firm swelling in the right iliac fossa, rendered the nature of the affection quite certain. After complete rest for four days the temperature fell to normal, and the whole condition became so greatly improved that on Monday, June 23rd, the King was able to travel to London.

On Tuesday, the 24th, the iliac swelling was found to have again increased and become tender, and this was accompanied by a fresh rise of temperature. The formation of an abscess was now so obvious that, to avoid the danger of a general septic peritonitis, the question of its immediate evacuation became a matter of urgency, and rendered any chance of his Majesty being able, in accordance with his own earnest wish, to go through the Coronation ceremony utterly hopeless. Lord Lister and Sir Thomas Smith were summoned, and agreed with Sir Frederick Treves, Sir Francis Laking and Sir Thomas Barlow that an operation could no longer be delayed. The King yielded to the opinion of his medical advisers, and reluctantly gave his assent.

The operation was performed by Sir Frederick Treves at midday on Tuesday, June 24th, the anæsthetic being administered by Dr. Frederic Hewitt.

Beyond the anxiety which must necessarily always attend the first few days after an operation of this serious nature, the progress of the distinguished patient has been uninterruptedly favourable throughout, and there is now every reason to hope and believe that his Majesty's recovery will be speedy and complete. The various sinister rumours of grave complications, which have been so rife, may pass unheeded in view of the authoritative statement published in the medical journals that "his Majesty is suffering from perityphlitis, and nothing else."

By the express desire of the King the honours list in connection with the Coronation was issued on Thursday, June 26th, the day appointed for the ceremony so unavoidably postponed. The most striking feature of the list is the institution of a new order to be known as the Order of Merit. Lord Lister has been made a member of the Privy Council. The late Professor Huxley is the only medical man who has ever been similarly honoured. Baronetries have been given to Sir Francis Laking, K.C.V.O., Physician in Ordinary to his Majesty, and Sir Frederick Treves, K.C.V.O., C.B., Honorary Sergeant-Surgeon to his Majesty. The honour of knighthood has been conferred upon Dr. W. J. Collins, ex-chairman of the London County Council; Mr. Alfred Cooper, a member of the council of the Royal College of Surgeons of England; Dr. J. Halliday Croom, president of the Royal College of Surgeons of Edinburgh; Dr. Thomas R. Fraser, president of the Royal College of Physicians of Edinburgh; Mr. Victor Horsley, F.R.S., surgeon to University College Hospital; Mr. H. G. Howse, president of the Royal College of Surgeons of England; Dr. William Macewen, F.R.S.,

Regius Professor of Surgery in the University of Glasgow; Dr. Thomas Myles, president of the Royal College of Surgeons in Ireland; Dr. Isambard Owen, Senior Deputy Chancellor of the University of Wales; Professor William Whitla, of Belfast; Dr. Conan Doyle, the well-known author; Mr. Charles Wyndham, the popular actor, who more than 30 years ago was an active member of our profession. The dignity of a Knight Commander of the Order of the Bath has been bestowed upon Sir William Church, president of the Royal College of Physicians; John Dennis Macdonald, F.R.S., Inspector-General of Hospitals and Fleets; Surgeon-General William Taylor, M.D., C.B., Director-General of the Army Medical Service; Surgeon-General John H. Woolfryes, M.D., C.B., Honorary Physician to the King; Surgeon-General Annesley De Renzy, C.B., late of the Indian Medical Service. That of Knight Commander of St. Michael and St. George upon the Honorable Frederick William Borden, M.D., Minister of Militia and Defence of the Dominion of Canada; Surgeon-General H. Pinching, Head of the Sanitary Department at Cairo. Among minor distinctions, Major Ronald Ross, F.R.S.; Dr. B. Arthur Whitelegge, his Majesty's Chief Inspector of Factories; Inspector-General Duncan Hileston, M.D.; Inspector-General John Grant, M.A., M.B.; Lieutenant-Colonel Sir James R. A. Clark, Medical Staff Corps; Fleet Surgeon James Porter; Lieutenant-Colonel Patrick F. O'Connor, I.M.S.; and others receive the Commandership of the Bath.

This list, though not complete, bears witness to the gratifying fact that a large number of members of our profession have had their claims to honourable mention duly recognised, and that in the allocation of Coronation honours the advisers of the Crown have wisely done justice to a fair proportion of those who are active workers in the great cause of humanity.

The seventieth annual conference of the British Medical Association was held in Manchester during the last week of July. By the kind permission of the Dean of Manchester a special service was held in the Cathedral on Tuesday, July 27th, before the business of the meeting was entered upon. An eloquent sermon was preached by the Right Rev. Bishop Thornton, D.D., Vicar of Blackburn. Dr. Bagot Ferguson, of Cheltenham, the retiring president, occupied the chair at the first general meeting and introduced his successor, Mr. Walter Whitehead, consulting surgeon to the Manchester Royal Infirmary. Mr. Whitehead, having taken the chair, proposed that a message of congratulation be sent by the association to the King on his marvellous recovery. He reminded his audience that the King was a member of their association, and it was therefore obvious that their first and most pleasant duty at the commencement of their proceedings was to put on record their sense of gratitude at his Majesty's preservation from the imminent peril in which his life had so recently been placed. A vote of thanks was then passed to Dr. Ferguson for the able manner in which he had presided over the association during the past 12 months, and he was elected a vice-president for life. The report of the council of the association was afterwards presented and adopted. The meeting then adjourned till the evening, when Mr. Whitehead delivered his presidential address. The hall was crowded, and among the audience were many ladies. The proceedings were opened by the Lord Mayor of Manchester, who in a genial speech offered on behalf of the city he represented a hearty welcome to the association. The president's address consisted of a review of the work of some of the men to whose energy and enthusiasm were due the development of the institutions which had gained for Manchester the distinguished place which

it had long held in the intellectual life of the country. He pointed out that in the foundation of these institutions members of the medical profession had taken a large, and in many instances, the leading part, and that their devotion to scientific studies in those early days had frequently given a powerful stimulus to the commercial prosperity of the city and district. Manchester was the first great commercial city to found a complete medical school, and subsequently to secure, in spite of much opposition, the establishment of a great university in the North of England. It might, therefore, be looked upon as the pioneer of provincial medical education. The plan of a federal university had served its turn, but higher education in Manchester had now reached a stage when a local university had become not only a necessity but a legitimate claim. Such a change would afford an opportunity for bringing into active co-operation Owen's College and the Royal Infirmary on the one hand, with the School of Art, the College of Music, and the Municipal School of Technology on the other. Within a radius of 30 miles there dwelt a population as large as that within the same radius of Charing Cross, and it might be safely affirmed that Manchester had not been behind-hand in dealing with the serious problems of water supply, sewerage disposal, and housing which the requirements of such a multitude demanded. An eloquent address terminated by the following quotation from the works of Lord Bacon, which the president thought might fittingly be adopted as the motto of the association:—"I hold every man a debtor to his profession; from the which as men, of course, do seek to receive countenance and profit, so ought they of duty to endeavour themselves, by way of amends, to be a help and ornament thereunto. This is performed, in some degree, by the honest and liberal practice of a profession; when men shall carry a respect not to descend into any course that is corrupt and unworthy thereof, and preserve themselves free from the abuses wherewith the same profession is noted to be infected; but much more is this performed if a man be able to visit and strengthen the roots and foundation of the science itself, thereby not only gracing it in reputation and dignity, but also amplifying it in profession and substance."

A conversazione, given by the president and local executive committee, was afterwards held in Owen's College, and was attended by a large number of guests, including many of the prominent residents in Manchester.

On Wednesday evening the address in Medicine was given by Sir Thomas Barlow, Bart., K.C., V.O., M.D. The oration was based upon the thesis that "the advances in the treatment of disease have been real and satisfactory in proportion as they have been harmonious with the complete knowledge of the natural history of disease"; and his argument was grounded, not only on the results of clinical observation, but also on those which have accrued from the application of bacteriology to the elucidation of questions of etiology, pathology, and treatment.

On Thursday an address on obstetrics was delivered by Dr. William Japp Sinclair, the Professor of Gynaecology in Owen's College, who chose for the subject of his remarks "Carcinoma in Women, chiefly in its Clinical Aspects." Though careful not to minimise the value of pathology and bacteriology, the lecturer insisted vigorously upon exact clinical observation, followed and corroborated possibly by experimental research, as the means by which the secret of cancer is most likely to be ultimately discovered; while he was no less emphatic in the expression of his opinion that the uterus is the field wherein the hidden secret will be

found, and to which, therefore, investigation of the disease should be chiefly and primarily directed.

Throughout the week many valuable papers were read and discussed, and the various sections in which the detailed work of the meeting was carried through were uninterruptedly busy, and in some instances experienced difficulty in coping with the vast amount of work set before them.

Victoria.

(FROM OUR OWN CORRESPONDENT.)

The Alfred Hospital—Reduction in the Charity Vote to Hospitals—The Women's Hospital—The Kew Asylum—Medico-Legal Cases.

THE vacancies on the honorary medical staff at the Alfred Hospital were filled by the managers at their last meeting. The election, which did not excite much enthusiasm, resulted as follows:—Hon. physician to in-patients, Dr. A. V. M. Anderson; hon. physician to out-patients, Dr. Louis Henry; hon. surgeon to out-patients, Dr. Buchanan; specialist in skin diseases, Dr. Noyes.

Rumours are current that at one of the metropolitan hospitals, which has always been noted for the friendly feeling of the honorary staff one to another, matters at present are not in an altogether pleasant way. It is to be hoped that the cause of the feeling of unrest which exists among the staff may for the good of the hospital be settled and not again revived.

The cutting down of the charity vote to the hospitals is likely to be severely felt by several of them. If the retrenchment necessary results in the cutting down of the clerical expenses no one will complain. Surely it is not to provide the secretary with a mansion and an ornamental garden surrounding it that subscribers give their donations. In a certain institution a trustee for an estate gave a donation after omitting to do so for several years. When the annual report was printed by some means his name was omitted. Nothing would do the powers that be except to reprint some copies of the report with the name included. Thus the money which should go to charity is wasted.

In connection with the Women's Hospital everything is in a much more satisfactory position. The committee and the honorary medical staff are working unitedly in the interest of the hospital. Dr. McNaught, who was appointed resident surgeon of the midwifery department at a salary of £250 per annum, was informed by the committee that the funds of the hospital would not permit of such a salary, and they offered him £50 a year, which he agreed to take. At the last meeting of the committee, held on Friday, the 3rd instant, Dr. Herlitz was appointed junior resident medical officer at a salary of £25 a year. Dr. Muir, senior medical officer (infirmary department), has resigned his appointment after having been connected with the hospital for two years and three months. It was his intention to resign some time ago, but he has continued to hold office until the difficulty of appointing a resident medical officer was settled. Dr. Muir's resignation was received with regret, as he is a very popular and efficient resident medical officer. The committee anticipate no trouble in filling his position. The old committee when resigning laid stress on the fact that, notwithstanding the bad times, they left the hospital free from debt. Since the new honorary treasurer has been investigating the books he has discovered that the old committee had

practically used up all the reserved funds of the hospital, amounting to over £11,000, in the last few years, no less a sum than £2700 being drawn upon during the last 12 months. According to figures placed before the committee at its last meeting by the honorary treasurer, the amounts received from the Government, the municipalities, and public subscriptions varied but little during the last five years. Dr. E. R. Anderson, hon. surgeon out-patient department, has resumed duty after an absence of six months on sick leave.

There have been all sorts of inquiries in connection with the conduct of Dr. Macbirtie, one of the resident medical officers at the Kew Asylum (Lunatic), with the result that Dr. Beatty Smith, the superintendent of that institution, has resigned, and now a board appointed by the Government is holding another inquiry into charges made against Dr. Macbirtie, and a very heated, and at times violent, cross-examination is being carried on by Mr. David Gaumson on behalf of Dr. Macbirtie. As the case is *sub judice* it would be better not to go further into this matter at present.

Two actions for damages against medical men, which have excited considerable interest, have come before the courts lately, and have both been abandoned. In the first case, Charlotte Tucker, of Williamstown, claimed £1000 damages for alleged unskilful treatment from Mr. A. Honman, M.R.C.S., of Williamstown. The case was struck out, as no appearance was made by the plaintiff, who evidently concluded that discretion was the better part of valour.

John A. Davis, of Richmond, sued Mr. G. A. Syme, and claimed £2000 damages for supposed unskilful operation upon plaintiff's nose. Before this case was struck out the defendant's counsel stated that Mr. Syme was prepared with evidence from some of the most eminent surgeons in the State which would vindicate his professional reputation. Costs were given against the plaintiff.

Such incidents as these tend to make the life of a medical man very harassing, and it is to be hoped that the Medical Defence Association will take steps to recompense Messrs. Syme and Honman for any pecuniary loss they may have incurred.

Selina Sangal, who was condemned to death for complicity in the murder of her husband, Edward C. Sangal, made formal application for an arrest of execution on the ground of her being *enroute*. Drs. Andrew Shields and Ernest Godfrey examined the prisoner, and declared her to be *enroute*; and the sentence was ordered to be stayed until the delivery of the child, or until it would be no longer possible in the order of nature to be delivered.

THE MANCHESTER MEETING OF THE B.M.A.

(To the Editor of the Australasian Medical Gazette.)

SIR,—Having spent the past 13 years in Victoria and having been a member of the B.M.A. for 15 years without the opportunity of attending an annual meeting, I embraced the chance when in England of attending at Manchester last month.

The programme was divided into two parts, social and professional. The social section was extremely well patronised. The various fêtes, garden parties, conversaciones, at homes, excursions, and ball were thronged. The entertainers had no cause to complain of want of appreciation or participation on the members' parts. There was a great rush for tickets for every function. Frequently medical visitors were disappointed; first come first served was the motto. The

general arrangements were capably carried out, and the office work was well organised. Members' cards were issued with the programme of proceedings on each. A day-book—a good-sized volume—was printed and presented to members each morning on request. A book on "Excursions" was also supplied, and a handsome volume, descriptive of Manchester, was given to each of us. I noticed that much of the information was frequently reprinted. It occurred to me that time and money could have been saved in this department.

Mr. Walter Whitehead, F.R.C.S. (Edin.), made a courteous and able president. His address, delivered in the large hall at Owen College, was well attended by members and friends. Prior to his address foreign visitors and delegates were presented to him. The only Australian who attended and was presented was from Western Australia; he was well received. The Sydney members were absent, and the Victorian branch was not represented.

The professional part of the proceedings was what I looked forward to with most pleasurable anticipations, and I was well pleased with what I managed to hear and see; but taking everything into consideration, the meeting was a disappointment to me as a practitioner of medicine and surgery.

The fault is, there is too much attempted and too little time given to the professional element. The work is divided into, I think, 17 sections. All these sections are at work at one and the same time. My inclination took me to the surgical section, but many other matters of great interest to me were going on in other rooms at the same time; these, of course, I missed.

Members interested in the work of two or three different sections keep moving from one room to another, and the continual entrances and exits disturb the other members. Curiously, too, I noticed that the hinges of nearly all the doors squeaked. It occurred to me that men interested in synovial fluid were above thinking of a little common grease.

A time limit is arranged for each speaker, and a bell then rings. I never once saw it observed. Sometimes I was very pleased, and sometimes not. Occasionally meetings and social functions were going on at the same time.

Taking the meeting as a whole, I feel that specialism is getting more pronounced, and anyone who practises only in one section could spend a profitable week at the B.M.A. meeting, but if the G.P. is to be catered for mentally some other arrangement of the work must be devised and carried out.

If I were a B.M.A. "Mikado" I would cut out a great deal of the social programme or else lengthen the "working hours," and devise some means by which the sectional would not have to clash so much.

The sum of the work carried out was good. Nothing very new or startling was sprung on us, but the meeting will mark another year past in British medical life. The majority of the men I met seemed satisfied they had had a good time, and renewed pleasant acquaintances and enjoyed a nice, social, semi-professional holiday.

Yours truly,

Peckham, London, S.E.

A. W. ESLER
(of Heathcote, Victoria).

INQUESTS ON DEATHS DURING OPERATIONS.

(To the Editor of the Australasian Medical Gazette.)

SIR,—It is not my intention to enter into the merits or demerits of your article in the journal of August 20th headed "Inquests on deaths during operations."

Permit me to draw your attention to the main issue. You say "the question arises, Is an inquest necessary in a case of this kind?" While large discretionary power is given to a coroner to decide whether it is to be held or not, it is clearly his duty to inquire into the circumstances attending the death of any patient in a public hospital which has occurred as 'the result of, or has been accelerated by, an anæsthetic or operation, or both.' Copies of the report of this case were forwarded to the editors of the *British Medical Journal* and the *Australasian Medical Gazette* with the object of ascertaining the usual mode of procedure under similar circumstances in great Britain and Australia. Replying, Mr. Mayo Robson writes me: "Under such circumstances, unless the operation had been done for accident, or unless the death was due to the anæsthetic, we should here sign the certificate in the ordinary way." This is the very point for which I contend. It must be apparent to anyone giving a little thought to the subject that there are sound and weighty reasons against the practice you advocate, and when we differ from usages in the old country it might be wise to consider these reasons. For my own part I hope the day will not be so far distant, in New Zealand at any rate, when the public will have sufficient trust in their surgeons to permit them to exercise their own judgment as to their right mode of action in these painful cases.

Yours faithfully,

FRED. J. BATCHELOR, M.D.

Dunedin, N.Z.,

September 11th, 1902.

[In reply to Dr. Batchelor we may state that we have given something more than "a little thought to the subject," having been personally concerned in investigating cases of this nature for some years. The opinions expressed in our article are based on the usual course of procedure in this class of cases in New South Wales, a course which we still think the most advantageous to both the public and the practitioner.—Ed. A.M.G.]

A PECULIAR REQUEST.

(To the Editor of the Australasian Medical Gazette).

SIR,—I am medical officer to a small up-country hospital. The committee have asked me to state on each patient's ticket of admission how long the illness of such patient will, or may, last. I have had a good many years' hospital experience and have never been asked such a question before. In your next issue please kindly say if such a request is usual. There is, of course, no harm in it, but I cannot see any good.

I am, your obedient servant,

M.D., L.S.A.

September 11, 1902.

[Such a request is unusual, and, in our opinion, unnecessary.—Ed. A.M.G.]

OBITUARY.

A. W. FINCH NOYES, M.R.C.S. (Eng.), Deniliquin, N.S.W.

We regret to record the death of Dr. Alfred William Finch Noyes on September 30th last, after a short illness, aged 68 years. Deceased received the diploma of M.R.C.S., London, in 1857. He practised in London a short time, and joined the army service. Subsequently he emigrated to Australia, and about 45 years ago accepted the position of hospital surgeon at Deniliquin, where he continued to reside, practising his profession,

up to the time of his death. He was several years an alderman, and occupied the mayoral chair. At the time of his death Dr. Noyes was gaol surgeon, a justice of the peace, coroner, and a member of the licensing bench and of the old-age pension board. He has left a widow, one son (Dr. Alex. N. Finch Noyes, of Melbourne), and seven daughters.

THOMAS EVAN FRANKLIN, B.A. (Dub.), L. et L. Mid. R.C.P. and R.C.S. (Edin.), L.A.H. (Dub.), Parramatta.

After an illness extending over some weeks, Dr. T. E. Franklin, Government Medical Officer for Parramatta district, died at his residence, Parramatta, on September 26th last. He had been ailing for some time, and about three days before his death he had a paralytic stroke. He was 47 years of age, was a native of Ireland, and had been in the public service for about 12 years. He had been in Parramatta for about four years, and previously had filled the post of surgeon and dispenser at Trial Bay prison.

JOHN MACDONALD, L. et L. Mid. R.C.P. and R.C.S. (Edin.), L. Mid. R.C.S. (Eng.), Dunedin, N.Z.

Dr. John Macdonald, of Dunedin, died in August last. He had been about 24 years in Dunedin, and made a specialty of skin diseases. He was lecturer on *Materia Medica* in the Otago University. About two years ago he went to Europe and was operated upon, and then returned to the colony, but the operation was not successful. He was held in very high esteem.

MEDICO-ETHICAL AND MEDICO-LEGAL.

A correspondent (Dr. A) writes to us as follows:—"At 11 p.m. last night a messenger came to my door, saying I was to go out again and see a patient I had visited in the morning. I asked who sent for me, and the reply was Dr. B. I then asked for an explanation, and the one given was to the effect that the relatives wished for another opinion, and had sent direct to either Dr. C or Dr. B, both of X, to come out without me. The messenger announced that Dr. B was then on his way out, and had sent him on to tell me to hurry up and go out with him. I absolutely refused.

This morning the father of the patient arrived, saying the child was dead, and that Dr. B had been stopped on his way, at the same time explaining how Dr. B had been sent for. The same morning a letter came to hand from Dr. C, stating he had been asked to see the child immediately before Dr. B, but after hearing I was in attendance declined at once.

Now, I have evidence to show that Dr. B knew perfectly well I was in attendance, and also that I was not communicated with previous to his being seen—the fact of his sending the messenger back to me to inform me that he was going would be in itself proof enough—and I maintain that his conduct was grossly unprofessional, and as such should be condemned.

Before closing I should like to compare the conduct of the two men, Dr. C and Dr. B."

*.*We fail to see that Dr. A has sustained his charge of unprofessional conduct against Dr. B. Medical men are apt sometimes to overlook the right of patients to change their medical attendant, or to ask for a consultation. This case was obviously one of extreme urgency, and we cannot but think that Dr. B in at once acceding to the request of the parents for his immediate attendance, at the same time sending word to Dr. A that he was

on his way to visit the patient, and asking him to come out as well, acted in accordance with medical etiquette in an emergency, especially as Dr. B resided in a town four miles distant from Dr. A. Had Dr. B entirely ignored Dr. A in the matter, the latter would have had just cause of complaint.

L.S.D. writes:—"I enclose an assurance form which the members of the Oddfellows in my district wish me to fill up. Kindly inform me at what charge other medical men have agreed to do this. The sums to be assured, I am informed, will not exceed £100 to £150."

*.*This matter is at present engaging the attention of the Council of the New South Wales Branch of the B.M.A., and our correspondent will find a discussion upon it reported on page 533 of this issue.

HOSPITAL INTELLIGENCE.

North Adelaide Hospital.—A bazaar in connection with the North Adelaide Hospital was held in the Town Hall from October 11th to 18th. The North Adelaide Hospital is heavily burdened with a debt of £3000. Under the former management this was a private hospital, but now a limited number of patients are treated free, and the number of free beds will be increased when the debt is removed.

Albury Hospital.—Last month his Excellency Sir H. Rawson, K.C.B., State Governor of New South Wales, laid the foundation stone of a new wing to be devoted to the reception and treatment of patients suffering from infectious diseases. This addition to the hospital was made possible by a generous donation from Mr. J. Iliffe, of Albury, supplemented by a grant from the New South Wales Government.

The hospital at Berhampore, Wellington, N.Z., which was erected at the time of the plague scare for a plague hospital, has been used as a hospital for scarlet fever patients. There are nine in it at the present time.

Wagga Hospital.—At a meeting of the hospital committee recently it was decided that a donation of £10 from the Independent Order of Oddfellows for the purpose of constituting the Grand Master of the Order a life governor of the institution could not be received on that condition, as it was contrary to the spirit of the Act. It was ordered that the money be returned.

The Women's Hospital, Melbourne.—At a meeting of the committee of the Women's Hospital a report was received from the sub-committee of enquiry recommending that a new style of bed card be introduced into the hospital wards. Hitherto the cards have indicated whether occupants of beds are married or single, and much exception has been taken to this as a needless humiliation to single women in the midwifery ward. In future the bed card will contain only the name of the doctor in charge of the case and the date of admission. Other particulars will be recorded privately.

St. Margaret's Maternity Hospital, Sydney.—A portion of the Zetland Estate, Waterloo, has been secured, upon which it is proposed to erect suitable up-to-date premises for this hospital.

Prince Alfred Hospital.—At the monthly meeting of the board of directors of the Prince Alfred Hospital, held on September 19th, the report of the

medical superintendent showed that on the day of the meeting there were 246 patients for the 236 beds available, the balance having to be accommodated in shake-downs. It was resolved that for the future the official hours for attendance of the honorary medical staff be between two and six p.m., and that the members of the staff be requested to state what hours they would prefer to attend on their respective days. It was decided that a lift be erected at a cost of £200 for the carriage of the patients from one floor to another, in a central position near the administrative block. His Excellency the Governor, with the advice of the Executive Council, has been pleased to appoint Sir James Reading Fairfax as a director of the hospital, in the room of Mr. C. B. Stephen, resigned.

Sydney Hospital.—At the last monthly meeting of the board of directors the hon. treasurer commented on the increased cost of provisions, etc., and stated that the greatest difficulty was being experienced in keeping the accounts within reasonable bounds. Further leave of absence for three months was granted to Dr. Ronald Pope. Plans, specifications, and tenders for alterations to the isolation cottages were submitted and approved.

MEDICAL NOTES.

Hospital Saturday in Brisbane.—Street collections in aid of the hospitals took place on October 4th. Last year the amount collected totalled £340. The returns so far available total £321, but some are still to come, and it is expected that this year's collections will about equal last year's.

An Income Tax Decision.—In making his return of income, a medical practitioner in Victoria claimed to deduct the price he had paid on the purchase of a practice from another practitioner in the country, and also £17, being commission and costs paid in arranging the purchase. Under the contract to purchase the practice the sum to be paid was £270, and the purchaser also agreed to pay the vendor 10 per cent. of the gross earnings of the first year. It was sought, on behalf of the taxpayer, to deduct from his income £307, which included £35 as 10 per cent. of the first year's takings. The Commissioner of Taxes allowed the deduction of £35, but disallowed the balance, holding it was capital, and not an outgoing expended in the production of income. The objection was heard before Judge Hamilton, who stated a special case for the opinion of the Supreme Court. The Full Court agreed that the Commissioner's view was the correct one, and that the price paid for the purchase of the practice was capital, and not to be deducted from income.

Bubonic Plague.—A fatal case of plague was reported from Townsville on September 25th last. The Commissioner of Public Health at Brisbane has issued a return showing that the last rat found to be infected with plague was discovered on August 29th. Since then 851 rats have been examined, but none were infected. Rat gangs are at work in most of the northern towns.

We would direct the attention of our readers to the special form of Combined Life and Accident Policy which the Mutual Life Association of Australasia are offering in our advertising columns.

WANTED.—An Adjustable Easy Chair (Harvard or other pattern) for Consulting Room. Good condition. Moderate price. Apply to "W," at this Office.

PERSONAL ITEMS.

Mr. E. T. Thring, of Macquarie-street, Sydney, has returned from a trip to England, and has resumed practice.

Dr. Charles Ryan, of Collins-street, Melbourne, has returned from his trip to Europe, and has resumed practice.

Dr. Grace Russell, who recently arrived from Auckland, where she practised for some time, has commenced practice in College-street, Sydney.

Dr. W. F. Litchfield has commenced practice as a specialist in the diseases of children at College-street, Sydney.

At Cobar, Dr. Robinson's stables, buggy, sulky and harness were destroyed by fire a week or two ago. Two horses were burnt to death. The loss is estimated at £150.

At the Melbourne Hospital, on October 8th, a large number of guests were present at the opening of the new tennis court, a present to the officials of the hospital from Dr. McInerney. Mr. F. R. Godfrey, in a short speech, declared the court open, and on behalf of the officials of the hospital Dr. Holmes presented Dr. McInerney with a suitably engraved sovereign case.

Dr. Ross has resigned the presidency of the Molong Hospital (N.S.W.).

On October 10th a presentation address and purse of 160 sovereigns, on behalf of the subscribers, was made by the Mayor of Lismore (N.S.W.) to Dr. Bernstein in recognition of his long services to the town and district.

On September 9th, at Wilcannia (N.S.W.), the Mayor, Dr. Dey, was married to Miss L. Gaden.

Dr. Maffey, who has been resident superintendent at the Newcastle Hospital for the past two years, has resigned his appointment, and is now entering private practice. Dr. G. R. C. Clarke, M.B., Ch.M., of Sydney, who was recommended by the Dean of the Faculty of Medicine of the Sydney University, has been appointed his successor.

At North Sydney, on August 20, Dr. E. A. Bardsley, of Waverley, was married to Miss A. M. Rabone.

At the annual meeting of the Field Naturalists' Section of the Royal Society of South Australia, held last month, Dr. Angus Johnson was elected chairman for the ensuing year. Dr. Johnson was a member of the society prior to his departure for Europe some years ago.

Dr. W. L. Mullen has been appointed acting medical superintendent of the Melbourne metropolitan lunatic asylums.

Dr. MacGregor, Inspector-General of Hospitals and Asylums (N.Z.), has returned from his trip to Europe.

MEDICAL MEN who purpose applying for the position of medical officer to the Brisbane Associated Friendly Societies' Medical Institute are invited to communicate with the Hon. Secretary of the Queensland Branch of the British Medical Association, Brisbane.

Dr. Gale, of Kaikoura (N.Z.), has given up his practice, and left by the "Gothic" for England.

Dr. D. Morrison has succeeded to Dr. Craig's practice at Gisborne (N.Z.).

Amongst the medical men recently returned with the Ninth and Tenth New Zealand Contingents were Drs. Bakewell and Eccles. Dr. Bakewell is practising again in Auckland, and Dr. Eccles is at present at Mangonui.

Dr. Reekie has settled at Mangonui, New Zealand.

MEDICAL APPOINTMENTS.

NEW SOUTH WALES.

Anderson, Arthur, M.B., Ch.M. Syd., to be Junior Medical Officer, Department of Lunacy.
Chisholm, Wm., M.D., M.R.C.S. to the Medical Board. N.S.W.
Fullerton, Alexander Young, L.R.C.P. Lond., M.R.C.S. Eng., to be Government Medical Officer and Vaccinator at Murrumbidgee.
Kelly, Robert Vandeleur, C.B., L.R.C.P. Edin., L.R.C.S. Edin., F.R.C.S. Edin., to be Government Medical Officer and Vaccinator at Delegate.
MacMaster, D., B.A., B.Sc., M.B., Ch.M. Syd., M.R.C.S., L.R.C.P., to be Hon. Assistant Surgeon Sydney Hospital for Sick Children.
Wade, R. B., M.B., Ch.M. Syd., to be Hon. Assistant Surgeon Sydney Hospital for Sick Children.

VICTORIA.

Chapman, John Taylor, L.R.C.P., to be Public Vaccinator for the Metropolitan District.
Henry, Dr. Louis, to be Hon. Assistant Physician at the Alfred Hospital.
O'Brien, John A., M.B., etc., to be Acting Collector of Imposts for the Department of Hospitals for the Insane, during the absence of James V. McCreery, L.R.C.S.I., on sick leave.

The following to be Health Officers for the Shires set opposite their names:—

McWilliams, Henry Heber, L.R.C.P., Shire of Lancefield.
Peipers, Frederick, M.D., Shire of Whittlesea.
Reid, George Marr, M.B., Shire of McIvor.
Shields, Andrew, M.D., to be Assistant Government Medical Officer, during the absence of Dr. McCreery (Inspector of Lunatic Asylums) on sick leave.

The following to be Public Vaccinators for the districts respectively mentioned, viz.:—

Hayes, James Bennett, L.R.C.P., South-Western.
Matthews, James Forrester, M.R.C.S., South-Eastern.
McWilliams, Henry Heber, L.R.C.P., Midland.
Peipers, Friedrich, M.D., Metropolitan.
Owen, Frederick James, M.D., Midland.
Owens, Edward Matthews, M.D., Metropolitan.

O'Brien, John Aloysius, M.B., Government Medical Officer, to be Acting Medical Superintendent, Kew, Hospitals for the Insane.

WESTERN AUSTRALIA.

Ick, T. Edwin, to be Public Vaccinator at Peak Hill.
Maloney, Patrick J., to be District Medical Officer at Busselton, during the absence of Dr. Hungerford.
Miskin, Dr. L. J., to be District Medical Officer and Public Vaccinator at Lawlers, during the absence on leave of Dr. F. S. Butler.

TASMANIA.

Hayward, W. B., to be a Surgeon Superintendent of the General Hospital, Launceston.

QUEENSLAND.

Rendle, Richard, F.R.C.S. Eng., to be Medical Officer at Cloncurry.

NEW ZEALAND.

Gordon, Dr., to be Honorary Visiting Surgeon of the Auckland Hospital.
Pollen, Henry, M.B., to be a Port Health Officer for the Port of Wellington.

The following to be Public Vaccinators for the districts set opposite their names:—

Adams, Henry, M.R.C.S., L.R.C.P., Wellington.
Adams, Robert Noble, M.B., etc., Takaka.
Burrell, Andrew Guthrie, M.B., etc., Springburn.
Dawson, Charles McBeath, M.B., etc., Woodville.
Fitzgerald, William, M.B., Waimangaroa.
Hamilton, Thomas, M.B., Rakaiia.
McLean, Henry John, M.B., etc., Wellington.
Millington, John Perrett, L.S.A. (Lond.), Ahaura.
Perkins, Alfred Temple, M.R.C.S. (Eng.), L.R.C.P. Edin., Wellington.
Purchas, Frederic Maurice, M.B., etc., Dargaville.
Stenhouse, Andrew, M.B., etc., Clutha.
Wheeler, Charles Henry, M.D., etc., Hokiangi.
Williams, William Ernest, M.B., etc., Pukekohe.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

VICTORIA.

Ffrost, Valiant Galfred, L.R.C.P. et R.C.S. Edin., 1902.
Kyriazopoulos, Constantine Michel, M.D., Athens, 1891.

WESTERN AUSTRALIA.

Ick, Thomas Edwin, M.B. 1887, B.S. Melb. 1888.
Moloney, Patrick Joseph, L.K. and Q.C.P.I. 1887, L.R.C.S.I. 1888.
Moore, Samson Courtenay, M.B., B.S. Victoria University 1898.

TASMANIA.

Hearne, William Weston, M.B. Melb. 1894, Ch.B. Melb. 1897.
Morton, William Alexander, M.B. Melb. 1886.
Stopford, Robert, L.K. and Q.C.P. Irel. 1886.

NEW SOUTH WALES.

Halcomb, Charles Digby, M.B. Syd. 1902.
Rosa, Alfred Peter, L.R.C.P. Edin. 1893, L.R.C.S. Edin. 1893, L.F.P.S. Glasgow 1893, M.D., M.S. Edin. 1895.

For Additional Registration.

Wilkinson, W. Camac, F.R.C.P. Lond. 1901.

BIRTHS AND DEATHS.

BIRTHS.

CORBIN.—On September 18th, at Southcott, Woodside, the wife of Cecil Corbin, M.B., of a son.
COLE.—On September 10th, at Mena House, East Melbourne, the wife of F. Hobill Cole, M.B., Ch.B., of a son.
LITTLEJOHN.—September 21, at Croydon, N.S.W., the wife of E. Sydney Littlejohn, of a son.

DEATHS.

COX.—1st October, at Craig Cruick, Milson's Point, Sydney, N.S.W., Mary Frances, wife of James C. Cox, M.D., daughter of Dr. W. Benson, of Hobart, Tasmania.
MACDONALD.—On the 24th August, at Stuart-street, Dunedin, N.Z., John Macdonald, L.R.C.P. and L.R.C.S. Edin., L.M.R.C.S. Eng.; born August 5th, 1837.

HUDSON'S "EUMENTHOL" JUJUBES (Registered) are a Gum Jujube containing the active constituents of well-known Antiseptics, Eucalyptol, Thymus Vulg., Pinus Sylvestris, Mentha Arv., with Benzo-Borate of Sodium, etc., and exhibit the antiseptic properties in a fragrant and efficient form. Sold by all chemists; tins, 1s 6d. Are Antiseptic, Prophylactic, reduce Sensibility of Mucous Membrane.

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AUSTRALASIAN MEDICAL GAZETTE.

A CEREBRAL HYDATID CYST.—REMOVAL: RECOVERY.

By George E. Rennie, M.D., M.R.C.P. (Lond.), Tutor in Medicine, University of Sydney, and Assistant Physician Prince Alfred Hospital, Sydney; and W. H. Crago, M.R.C.S., L.R.C.P. (Lond.), Sydney.

MEDICAL HISTORY BY DR. RENNIE.

Mr. H., a farmer residing in the Temora district in New South Wales, *æt.* 39 years, married, was first seen by me in consultation with Dr. P. M. Wood, of Ashfield, on October 12th, 1900. The history then obtained was that he had always been a healthy man, except for occasional bilious attacks, accompanied by headache and vomiting. There was no history of alcoholism or venereal disease. For the last three months he had not been able to do his work as previously, having had attacks of severe pain in the head and occasional vomiting. He described the pain as being all round the head, but rather worse across the forehead. In addition, he had had on two or three occasions an attack of momentary unconsciousness, but no sign of convulsion. He had also noticed some weakness of the left hand.

On examination I found him to be a rather spare man with a sallow complexion. He complained of the severe headache at times, and was not able to sleep well. There was no loss of memory or disturbance of consciousness or of his intellectual faculties. His speech and articulation were normal. The special senses were normal. The pupils equal, medium in size, reacted to light and convergence. There was some weakness of the left internal rectus, and he complained of occasional diplopia. There was some paresis of the left side of the face of supra-nuclear type, but no anæsthesia. The tongue was protruded in the middle line.

There was no tenderness on percussion of the head, or any alteration in the percussion note over any part of the head.

The left arm and leg were somewhat weaker than the right, but he still retained a considerable amount of muscular power. No objective anæsthesia was detected, although he complained of some subjective numbness in the left hand.

The deep reflexes on both sides were active, but no ankle clonus; the plantar reflex on the right side was definitely flexor in type; on the left side it was doubtfully extensor.

A diagnosis of cerebral tumour was then made, and he was ordered a mixture of potassium iodide and antifebrin.

I saw him a second time in consultation with Dr. Wood, on November 25th. He had been almost confined to bed since my first visit, and was very much worse. The headache and the vomiting were more troublesome, and there was an increase in the weakness of the left arm. The pupils were now unequal, the right being larger than the left, but both reacted to light and convergence. There was now also slight but definite optic neuritis, more marked on the right side. The paresis of the left face was more obvious. There was still no difference in the percussion note over the head, but he seemed to wince more when he was percussed over the right side than over the left. The left arm was paretic, the paresis affecting the finer movements of the fingers most, but he still retained the power of movement at all joints; that is, there was no absolute paralysis of any group of muscles. The left leg was weaker than the right, but the difference was not pronounced. No anæsthesia was detected.

The arm jerks were active, the left knee jerk exaggerated, and there was left ankle clonus, and the left plantar reflex was distinctly extensor in type.

I then considered that the patient was suffering from a tumour in the right cerebral hemisphere in the ascending frontal convolution in the site of the arm area. As the patient was manifestly going down hill, and there was a reason to suppose that the tumour might be an hydatid cyst, I urged an operation. This was consented to, and the patient was removed to Craigend Private Hospital. Soon after admission there he had an attack of unconsciousness, and was seen by Dr. Crago. He was very drowsy, and had conjugate deviation of the head and eyes to the left; his speech was blurred and indistinct. There was well-marked Babinski reflex on both sides. He soon rallied from this condition.

Next morning at eight o'clock he had a hypodermic injection of a sixth of a grain of morphia. Dr. Wood administered the anæsthetic, and Dr. Crago trephined over the site I indicated. Hydatid fluid was at once obtained, and about 4½ ounces were removed slowly by a small syringe, and the wound closed. During the operation the pulse rose from 50 per minute to 72 per minute and the left pupil dilated, but after the evacuation of the fluid it contracted again, and then both pupils became small from the influence of the morphia. The left knee jerk was active, there was left ankle clonus, but the plantar reflex was now indefinite.

Progress of the case.—The next morning he was feeling very well. He had only vomited once after the anæsthetic, and had passed water twice voluntarily. The pupils were equal. The left facial paresis was less marked. The left angle of the mouth moved both on protruding the tongue and on emotion. He could grasp fairly well with the left hand, but abduction of the fingers was somewhat impaired, and accurate apposition of the thumb and little finger was not possible. Both knee jerks were increased. Ankle clonus was present on both sides, but the plantar reflex was flexor in type on both sides. He had no headache.

December 1st.—He still felt very well; had no headache. The movement of the fingers was better. The left knee jerk was less active, and no clonus could be elicited. The plantar reflex on both sides was flexor in type.

December 3rd.—He was still feeling well, and was anxious to go home to his farm. When told that the operation had not been completed he was much upset, but was quieted on the situation being fully explained to him. At 3.15 p.m. he was again given a hypodermic injection of morphia, and Dr. Wood administered the anæsthetic, Dr. Blackburn being also present. Dr. Crago opened up the wound, and successfully removed the cyst wall.

December 4th.—He was restless all night, slightly delirious, and talked about the operation. He complained of pain across the forehead and eyes; the temperature rose to 101°, but it fell again to 99°. The paresis of the left side of the face was slightly more marked than on the previous day, but it was much less than before the operation. He was bright and cheerful, and his condition was in every way satisfactory. The reflexes were as before.

December 5th.—Had a good night, sleeping at intervals. Temperature and pulse normal. The paresis of the left face and arm is less. From this time he continued to make into an uninterrupted progress to recovery. On December 22nd he felt quite well, and was anxious to go home. His sight was good, the optic discs being only slightly pale. No facial paralysis was noticeable. The left arm and leg were now strong as the right, and the reflexes were normal on both sides.

We have learnt quite recently that except for an occasional headache he is quite well and strong.

Remarks.—I will leave to Dr. Crago to describe fully the surgical aspects of this case, and will only remark that whatever criticism may be made as to the method of treatment in this as in our first case, the result shows that this method has been successful in

rescuing two patients from certain death if no operation had been performed, and who would probably have died if operated on by the method previously adopted by other surgeons.

The signs presented by this patient on my first examination, though fairly definite of a new growth in the brain somewhere, were not sufficiently clear to warrant a definite localisation, and under these circumstances we considered it right to adopt the usual course of administering large doses of iodide of potassium as a preliminary method of treatment. At a later period the localisation became more obvious, and though it was not possible to diagnose a hydatid cyst for certain, it was quite justifiable to advocate operation, and the very satisfactory result proved the accurate localisation and the correctness of the opinion expressed. It is also very satisfactory that now, after the lapse of 18 months since the operation, the patient is remaining in good health, apparently none the worse for his dangerous experience.

SURGICAL HISTORY BY MR. W. H. CRAGO.

When I first saw the patient he was in a very apathetic state, and could with difficulty be roused; his speech was thick, and his eyes were both turned to the left; his complexion sallow, and the left side of face was expressionless. The tongue was protruded in middle line. Half an hour before I saw him he had been talking quite readily and freely, and had taken some Benger's food. He had evidently had a slight fit. The head was shaved, but no bulging was visible, and there was no perceptible alteration in percussion note. On November 29th at 8.30 a.m., after a preliminary hypodermic injection of $\frac{1}{4}$ th grain of morphia, CHCl3 was administered by Dr. Wood. As Dr. Rennie had located the cyst a little anterior to the arm area in the right motor cortex, this site was selected for trephining. A semi-lunar incision was made with the free convex border of the flap downwards. The flap, with the pericranium, was turned upwards. An inch trephine was used. The skull was not very thick. On removing the disc of bone, no pulsation was visible, and the dura mater, which felt tense, bulged into the opening. A fine exploratory needle was passed about $\frac{1}{4}$ or $\frac{1}{2}$ inch through the dura mater, and clear fluid at once obtained. The needle was not withdrawn until 4 ozs. of fluid had been obtained. The dura mater became depressed, and pulsation appeared as the fluid was drawn off. The disc of bone, which had been kept in warm saline solution, was replaced, and the scalp wound closed with silkworm gut and horsehair sutures. Double cyanide gauze and wool pads, fastened on by means of a capelline bandage,

formed the dressing. At 1 p.m. the same day I found the patient able to hold up his left hand without difficulty, and the expression of his face was much more natural. His temperature did not go above 99.2° F., and in a day or two he expressed himself as quite well, and wanted to go home, and come to the hospital occasionally to have his head dressed. Some slight extravasation of blood took place under the scalp, raising the flap and the surrounding scalp during the second day.

On December 3rd patient was informed for the first time of the second stage of the operation, and was much taken aback on account of feeling so well, but soon became reconciled to the inevitable. At 2.30 p.m. another hypodermic of a sixth of a grain of morphine was administered, and soon after 3.15 p.m. CHCl₃ was again administered by Dr. Wood. The flap, which was much thickened and raised by effusion of blood, was again turned up and the disc of bone removed. The opening in the skull was enlarged somewhat in a forward direction with gouge forceps. The dura mater looked healthy and so did the disc of bone. After incising the dura mater around three-fourths of the circumference of the opening, I ran in the exploring needle and again got fluid, but on withdrawing it there was a hissing sound from the escape of air or gas, followed by a jet of fluid slightly blood-stained and a little bulging of cortical substance. A pair of sinus forceps was passed through the little opening and the cortical substance was incised with a blunt-pointed bistoury in the direction of the corona radiata. The cyst wall was close to the surface and was caught with two pairs of forceps and withdrawn whole. The cavity was washed out with warm saline solution through a piece of drainage tubing. There was free bleeding from the cut edge of the dura mater and a pulsating discharge of blood from the cavity. The cortical substance was disturbed as little as possible; no attempt was made to pass a finger into the cavity. Two or three stitches were with difficulty inserted into the edges of the dura mater, and in the last I accidentally pricked a vein in the pia mater, which bled rather freely till stopped with artery forceps. This was too friable to tie, but was pretty quickly stopped by means of gauze pressure. Several thicknesses of iodoform gauze were placed in the trephine opening, outside the dura mater, and the ends left out at one angle of the scalp wound. This was removed three days later. The flap was united with several silkworm gut and horsehair sutures, the line of suture sprinkled with iodoform, and then dressed with double cyanide gauze, wool pads,

and a capeline bandage. The patient rallied fairly well from the anæsthetic, but afterwards became clammy. His temperature rose to 101° by 9 p.m., and he became restless and talked a good deal. A hypodermic of one-sixth grain morphine was given at 11 p.m. On December 4th: Dressed head, which looked well, and the swelling of scalp already much less. December 6th: Wound looking well. I removed gauze drain and inserted a piece of gauze just between the lips of the wound. December 7th: Looked remarkably well; flap still rather thickened, but edges look healed. Was able to sit up in bed to have his head dressed. Not much oozing. December 9th: Removed all sutures, and wound looked very well. There was much less thickening of flap. The patient was allowed to walk across the room and back, which he did with scarcely any assistance. December 19th: Progress has been uninterrupted. The wound had entirely healed two days ago, and the flap is nearly as flat as the other side. Patient has complained of a noise or thumping in his ears, with slight impairment of hearing on left side for the last few days; otherwise he looks well, and is a much better colour. Left off all dressings. Left hospital to-day.

Comment.—When presenting the notes of the first operation on T.G. at the meeting of the Branch in June, 1900, adverse comment was made on the plan adopted of performing the operation in two stages. The result of this second case has further convinced me of the wisdom of that method, however unsurgical it may appear, and I should unhesitatingly proceed in the same manner in any similar case that might come under my care.

In June last, thinking that these notes would have been read at that month's meeting, I wrote to the patient to ascertain his condition, and received the following account from Dr. Cookson, of Temora, dated June 25th, 1892:—

"Mr. H., a patient of yours, called on me to-day, asking me to answer your letter to him as to his present condition. His general health is good. During the summer just past he lost weight from 11 st. to 9 st. 7 lb. At the present time his weight is 10 st. 5 lb., his appetite good, and muscular strength good. He is able to lift heavy weights, bags of wheat, etc. Eyesight good, but if he reads for any length of time has pain in and behind right eye, extending over right forehead to back of right ear. This goes away at once on resting and stopping reading. He has numbness of forefinger, middlefinger and ringfinger of left hand. Memory very good. Can whistle; and has lost the buzzing in right ear, which at one time was an annoyance to him."

The temperature on the evening of the removal of cyst reached 101°, and the following evening 99.8°, but after that it never reached 99° again.

[Read before the New South Wales Branch of the British Medical Association.]

NOTES ON GASTRO-ENTEROSTOMY.

By C. S. Hawkes, M.R.C.S. (Eng.), etc., Brisbane.

GASTRO-ENTEROSTOMY is one of the less common operations one is called upon to perform, but in suitable cases it gives such striking and satisfactory results that perhaps a short consideration of some of the indications for its performance may be of value.

During the past two years I have performed the operation five times for chronic pyloric obstruction or chronic ulcer, and before discussing the diagnosis and indications for operation I will read some short notes of my cases.

Case 1.—P. K., male, aged 49, sent to me by Dr. Flynn, of Ipswich, with a diagnosis of chronic pyloric obstruction and dilated stomach. He was a thin, worn-looking man, had been in bad health for the last 30 years, starting with an obscure illness, which, as far as one could make out, pointed to ulcer of the stomach. For years he had vomited periodically, and always had discomfort after food. During the last 12 years he had been gradually taking less and less food, for he found that what he did take slowly accumulated in his stomach, and was vomited days later. One article after another was cut off till he was reduced to milk and porridge. He periodically vomited about once a week, sometimes oftener, a large quantity of foul-smelling food and fluid, was scarcely ever free from a dull, heavy headache, and was always constipated. I found on examination a lump at the pyloric end of a big dilated stomach, out of which I washed daily quantities of sour-smelling fluid. This made him much more comfortable and relieved his headache. He was then etherised by Dr. Brockway, and with the assistance of Dr. Flynn I opened his abdomen and found a big stomach stretching well below the umbilicus, and a firm, hard thickening of the pylorus, with some adhesions. On opening the stomach I found a firm fibrous thickening of the pylorus, so narrowing the orifice that I do not think a thin pencil could have been passed. I had to use considerable force to get the tip of my little finger into the opening, and I do not think I could have got it through without the exercise of an unjustifiable amount of force. I joined the upper part of the jejunum to the lower edge of the anterior surface of the stomach near the pylorus, using a medium sized Murphy's button, reinforced by a ring of mattress sutures. There was very little shock; he vomited bile for a few hours after the operation, and did not vomit again. I starved

him for a few days, and then gradually gave food, and he convalesced without a bad symptom. From 9 st. 9 lb. (his weight before the operation) he steadily gained up to 12 st. 4 lb., and then gradually got on to hard outdoor work, which brought him down to 11 st. 6 lb., at which he has remained for the last 18 months. Since the day of the operation he has not vomited once, takes any sort of food, and has been free from his previous almost constant headache.

Case 2.—Mrs. F., aged 47 years. She came to me for what she called bilious headaches, which consisted of a dull heavy headache for two days, followed by free vomiting. These attacks took place about once a week. Six years before she had slight hæmatemesis and melaena, got fairly well except for some epigastric discomfort at times, till about two years ago, when she began to lose flesh, and her weight went down from 12 stone to 9 stone 2 lbs. The attacks of periodic vomiting had steadily increased in frequency, till for some months past she had vomited on an average once a week, the vomit consisting of pints of sweetish smelling fluid, in which I found numerous sarcinae. Two days of dull headache always preceded a vomit. I washed out her stomach daily with considerable benefit. It was dilated, and held two quarts of water. In the pyloric region I felt a fairly movable mass, which varied much in position. One day it was easily felt and the next it was gone or in another position, as pyloric thickenings frequently are. She got very tired of the lavage, but as soon as it was stopped all her old symptoms returned, so I performed gastro-enterostomy. The operation was performed at St. Clair Private Hospital on December 3rd, 1901, ether being administered by Dr. Brockway. I found the pylorus freely movable, and almost closed by a firm fibrous thickening, probably at the site of an old ulcer. The stomach itself was very much dilated. I joined the jejunum to the lower border of the anterior surface of the stomach, near the pylorus, by a Murphy's button, supported by a row of stitches. She vomited a little for the first two days, first a little blood, then some bile, but never enough to be troublesome. She had a good deal of discomfort from flatulence, but once the bowels had acted freely she convalesced satisfactorily. It is now about nine months since the operation. She has not vomited since, has had no headache, is eating ordinary food without discomfort, and has put on about a stone in weight.

Case 3.—Mrs. M., aged 38. She was a thin worn woman, whose life history was anæmia.

at 17, gastric ulcer at 18; since then never free from epigastric tenderness, and frequently pain. Ten years ago she was found to have a movable right kidney, and all her pains were ascribed to it. The pains and discomfort got steadily worse, with occasional vomiting, but relief was nearly always obtained if she lay down for an hour or two after meals, but latterly this had ceased to give much relief, except with almost fluid food. She was never stout, but had wasted down to 6 st. 2 lb. I did not find her stomach much dilated, and in distending it with gas for examination I found a thickening which I took to be the site of the pylorus, though it was much closer to the median line than usual, and the stomach distended much more up to the left than was customary, so I thought I had to deal with a pyloric obstruction with perigastric adhesions. There was also a fairly movable right kidney. She had tried every conceivable form of diet and endless drugs without benefit, so on December 17th, 1901, she was etherised by Dr. Brockway, and with the assistance of Dr. Cooper I opened the abdomen, and found that we had to deal with a dilated cardiac end of the stomach, with an hour-glass contraction about four inches from the pyloric end. The pylorus itself was free from the hour-glass contraction, was much thickened, and fixed by adhesions. It was what I had taken to be the pylorus on examining her first. I did an anterior gastro-jejunostomy, joining the gut to the anterior surface of the stomach, close to the cardiac side of the constriction, using a Murphy's button, supported by a row of sutures. The constriction itself was formed by thickening and puckering round the site of an old healed ulcer, and had so diminished the lumen of the stomach that it was only by the exercise of considerable force that I could pass my little finger through it. The pyloric orifice itself was quite free. She steadily recovered, and is now, nine months after operation, free from pain and discomfort, can eat ordinary food, and has gained weight steadily.

Case 4.—J.B., male, aged 40. For the last 12 years he has had pain after food, following an attack of hæmatemesis 12 years ago. The pain never went quite away, always recurring an hour or two after food, never immediately after. After a time he began to get symptoms of dilated stomach, and vomited periodically large quantities of partially digested food. After various methods of treatment had been tried he was advised to use a stomach tube, and for two years washed out his stomach daily. At first he obtained great benefit from this practice, but lately it had ceased to give as much relief, and he had progressively lost flesh. Then he

got two attacks of hæmatemesis, and it was decided after consultation with Drs. Byrne and Crooke to operate. He was etherised by Dr. Brockway on September 1st, 1902, at St. Clair Private Hospital, and with the assistance of Dr. Crooke I opened the abdomen in the median line as usual and found a large dilated stomach with the thickened pylorus fixed by adhesions high up underneath the liver. On opening the stomach we found a much narrowed pyloric opening, and close to it on the anterior stomach wall was an unhealed ulcer. I performed a posterior gastro-enterostomy, using a Robson's bone bobbin. The operation itself caused but little shock, and no vomiting or other untoward symptoms. He convalesced steadily and is now eating ordinary light diet, chiefly meat and fish, without any discomfort or pain.

Case 5.—W.H., male. About two years before I first saw him he had a sudden severe attack of pain in the epigastric region. This was very severe for a few hours, and laid him up for a few days. He then got free from pain, and in his usual health for about four months; then he began to get pain after food, at first not for two hours or more after a meal, but as time went on the pain started sooner after taking food and became more and more severe till when I saw him any form of food, or even liquid, gave rise to severe and lasting pain. He had been under medical treatment for months without any very great benefit, and was steadily losing flesh owing to the difficulty in taking and retaining food. He was etherised by Dr. Brockway at St. Clair Private Hospital on June 20th, 1902. I opened the abdomen, and found the pylorus thickened. On opening the stomach I found that this thickening was due to an ulcer about $1\frac{1}{4}$ inches in diameter with thickened edges situated on the anterior wall and involving the orifice of the pylorus. The pylorus itself did not appear to be much narrowed. I performed a posterior gastro-enterostomy, using a Robson's bone bobbin, the opening being made on the posterior surface about two inches from the pylorus. He recovered without a bad symptom, had no after-vomiting and is now able to eat ordinary food without discomfort, and is quickly and steadily regaining weight.

These two classes of cases present different indications for the performance of the same operation. Taking the last case first, the main indication for operation was the progressively increasing pain and discomfort caused by food. This, if left alone, would have two endings: either the patient would gradually waste from inanition and fall a victim to hæmorrhage, perforation or some intercurrent disease, or else

the more acute symptoms of the ulceration would subside, pyloric obstruction take place, and the symptoms of dilated stomach with its attendant ill consequences would arise.

Perhaps a few points are worth discussing in connection with these cases of chronic ulcer. One has to consider what is the risk of leaving such a condition and what is the risk of operating; if an operation is decided upon what form of operation is the best. One has to remember in connection with these cases that frequently an ulcer may be present and give rise to few or no symptoms. On the other hand the symptoms may be so evident and severe that the merest tyro in diagnosis can give a confident opinion. Between these two extremes every grade of severity is met with. Chronic ulcers occur more frequently in men than in women, 72 per cent. in males, and only 28 per cent. in females, and when they do occur they are more frequently pyloric than situated in any other part of the stomach, about 75 per cent. of chronic ulcers being situated at the pylorus. This is in marked contrast to the acute ulcer, which is about equally distributed over the various parts of the stomach, and again the chronic ulcer is more often found after 30 than before, only about 7 per cent. of chronic ulcers occurring before that age. If it is decided to leave the ulcer alone one has to think what is the risk to the patient, and in this relation the following facts may be of interest:—From 15 to 20 per cent. of all cases of ulcer of the stomach die either directly or indirectly as the result of the ulcer. Einhorn in an analysis of 100 cases got the following results:—50 per cent. of cures, perforation and peritonitis in 13 per cent., dangerous bleeding in 5 per cent., pulmonary tuberculosis in 20 per cent., other complications and inanition in 12 per cent., so that the result of leaving an ulcer alone and trusting to medical treatment does not give on the whole very favourable results. What, then, is the risk of operating? Leaving aside for the present any discussion as to the advisability of performing operations other than gastro-enterostomy, one may say that the operative risk from the latest statistics is not much more than 5 per cent. in competent hands, so that, provided medical treatment has not cured the ulcer in reasonable time, it offers a very fair chance of recovery without great risk to perform a gastro-enterostomy for this condition.

Considering now my first four cases. These are instructive for two reasons. They were all old standing cases, and had been under the care of various medical men for years. The question then arises, how early was it possible

to have made an accurate diagnosis, and how soon could have operative interference have been advised? In an advanced case the diagnosis is easy; in the earlier stages far from being so simple. Periodic vomiting, not in relation to food, is always a symptom of serious import, and one that renders a close investigation most necessary. If this is associated with headache it is even more suspicious, and here one may draw attention to dilated stomach with its co-existing retention of decomposing food as one of the causes of periodic headache. Headache is usually the same, a dull heavy frontal and occipital ache, constant unless relieved by vomiting or washing out the stomach. It is probably toxic in nature, for washing out the stomach for some days stops it. In my second case it was a well-marked feature, always began two days before a vomiting bout, and was relieved once the stomach was emptied. In her case the headache had been regarded as ocular, and glasses had been prescribed to correct it. Nearly all cases have some heaviness and discomfort, with flatulence and eructation. All are constipated, and in advanced cases the quantity of urine is usually diminished. On examining the abdomen it is not always easy to find a slight dilatation of the stomach, and it is often extremely difficult to find a thickening of the pylorus, especially when, as sometimes happens, the pylorus is freely movable. At times one can see the contraction wave passing along the dilated stomach from left to right. If so, it is a sign of value, but the two procedures that give the most valuable information are washing out the stomach and dilating the empty organ with gas or air. Washing out the stomach is practically harmless when a little water is run in, and then the contents of the organ syphoned off. The washing shows the character of the retained material and the amount of decomposition that is going on. When the stomach is partly filled with water, one can with the patient erect percuss out the lower edge and see if it comes too low, and the quantity of water retained without discomfort shows the size and tolerance of the organ, which, when again emptied and distended with gas, shows clearly its size and position, and often brings into prominence a hitherto undiscovered tumour or thickening. Air can be pumped in through a tube. I prefer giving a dose of soda, followed by a dose of tartaric acid; the resulting carbonic acid gas distends the organ quite sufficiently for all practical purposes. In my third case, when using this method I thought I had to deal with a thickened pylorus fixed by adhesions, and I came to this conclusion because I felt a thickened mass close to the right of the

median line and the cardiac end of the stomach distended away up far to the left. This is always very significant of adhesions, and the fact that the recumbent position after food lessened the discomfort also pointed in the same direction. It is not at all uncommon, as in this case, for a movable kidney to be associated with a dilated stomach, though perhaps not in the relation of cause and effect; still, the fact is worth remembering, for it does not always follow that because a movable kidney has been discovered that therefore all the symptoms are due to it and not to some other co-existing lesion. Supposing, then, that one has arrived at the diagnosis of dilated stomach, secondary to chronic non-malignant obstruction, what is the best treatment? If there is a mechanical block at the pylorus it is obvious that putting drugs into the stomach will not help matters, except that possibly some antiseptic may delay fermentation. Washing out the stomach periodically cannot remove the block, but it can keep the organ clean and so relieve the headache. It is valuable because it mechanically cleans the mucous membrane and allows it to absorb what food it may, and when all is absorbed that can absorb, and all has passed through the narrowed pylorus that can pass, it washes away the debris and prevents fermentation with all its accompanying troubles. What drugs should be in the washing fluid does not matter very much; some prefer antiseptics, others not. Personally, I prefer bicarbonate of soda for its solvent action on the superabundant mucus. There is no doubt lavage gives marked relief, but it does not cure, and people get very tired of using it constantly, so one is led to advise some more radical cure by operation.

Briefly, operations may be of two varieties. Either one may make a fresh communication between stomach and gut, so that food can pass easily from one to the other, or one can so deal by excision, or dilatation, or plastic operation with the obstructed part itself, that the opening is made larger, and an attempt is made to restore something like the original channel. Leaving aside the relative merits of the two different classes of operation, one must remember that the patients are usually in such a bad condition that a quick operation is often advisable, so that in many cases a gastro-enterostomy will be the operation of preference because of its speedier performance. The junction may be made on the anterior or the posterior wall of the stomach; many consider the latter the better site because the opening is supposed to be more dependent, allowing food to pass more freely. It also lessens the chance of the incessant vomiting of

bile which sometimes occurs, though in none of my cases was the vomiting the least troublesome. The junction may be effected by three methods: simple suture, bone or other bobbins, or Murphy's button. As I could not obtain Robson's decalcified bobbins till recently, I used Murphy's button for the first three cases, always reinforced by a row of sutures, and also sutured the jejunum on the proximal side to the stomach wall to prevent too sharp a kink and possibly formation of a spur. In future cases I should prefer the bobbin. The minor details of the operation I will not trouble you with; they practically only concern the operator. The points I should like your opinion on are the possibilities of an early diagnosis and the advisability of early operative interference, for the mortality of untreated cases is necessarily high. If the obstruction is sufficient to prevent enough food getting through to keep life going, all must eventually succumb either from direct exhaustion or some intercurrent disease to which their weak condition predisposes them. The mortality of the operation is a gradually decreasing one, as better methods are formulated and wider experience gained. In non-malignant cases it has now been reduced to about 5 per cent., though comparatively recently it varied from 21 per cent. to 35 per cent. with different operators. Wider experience will show the earliest indication for operation and the best method of performing it, for the operation is as yet, if not in its infancy, yet only in the stage of early childhood, since only in 1869 Kussmaul, writing on the subject, said he feared to be "openly or secretly laughed at" for even suggesting the possibility of operation in such cases.

(Read before the Queensland Branch of the
British Medical Association.)

The Decrease of Insanity in Great Britain.—A reviewer in the *Journal of Mental Science*, referring to a decrease in the insane of Great Britain and Ireland during the last two or three years, asks to what cause it can be attributed. In searching for an answer he concludes that it must be something that has equally affected the three divisions of the United Kingdom. This something, he thinks, must be the South African war, "which has undoubtedly been occupying public thought more almost than anything else." He considers that it is exerting a tonic and bracing effect upon the mental constitution of the British race. He also points out that the same influence was noted in the United States during the American war of 1861, and in France in 1870. He concludes, however, "that this effect of the war is unlikely to prove other than temporary, but if it is productive of even a temporary steadying of the mental and moral character of the nation it will not have been in vain."

Messrs. H. J. LANGDON & Co., Melbourne, advertise on page xviii. the Pharmaceutical Products of the Société Chimique des Usines du Rhone, of Lyon, France.

A CASE OF TUMOUR OF THE SPINAL CORD WITH NECROPSY.

By Sinclair Gillies, M.A., M.D. (Lond.), Hon. Assistant Physician Prince Alfred Hospital, and Dr. Flashman, Pathologist to the Hospitals for Insane, Sydney.

TUMOURS affecting the spinal cord are fortunately not common, but from time to time such cases occur, and the question then arises, At what region of the cord is the tumour situate, and does it actually involve the cord, or simply press on it from without? If it press on the cord without involving it, surgical interference is indicated, and may give complete relief. If the growth involve the cord, no operation can be undertaken. Exact diagnosis is therefore of the utmost practical importance, and at times is extremely difficult.

We bring the following case before you as illustrating these difficulties:—

J. R., 47, a sawmill hand, was sent to me on November 16th, 1901, by Dr. Maitland, complaining of numbness in the left hand and general weakness.

History.—Seven months ago he first noticed a sensation of numbness in his left hand. This gradually spread up the arm and into the neck and occiput. At this time he began to have neuralgic pain in the left side of his neck and occiput. The pain troubled him only at night, when it kept him awake. Questioned on this point, he was not sure whether the pain kept him awake, or whether it was because "he got thinking of all sorts of things at night." He has worried much since the death of his wife from tuberculosis two years ago. Five months ago his left hand began to get weak, and the weakness has steadily increased till a month ago, when he had to give up his work. Within the last few weeks he has begun to feel weak in the legs, and to notice that his right hand is getting weaker. He has had no pain in either arm, but both feel cold, as do his feet. "Is always cold." He has lost a stone in weight during the year. For the past week he has had some pain in his left hypochondrium. He has never had syphilis or other serious illness. Has never smoked or drunk to excess. Has had no trouble with micturition. Has been very constipated for some months. Three months ago he had an attack of influenza, which left him weaker. He has vomited occasionally during past few years, but not for five months past.

His parents both lived to old age. One sister and one brother died of phthisis.

On Examination.—The patient is an anxious-looking man. He is powerfully built, but is unable to dress or undress himself, tires

readily, and is weak on his legs. Examination of his thoracic and abdominal viscera shows nothing abnormal. His urine is normal, but is secreted in small quantity and passed only once a day. His appetite is poor, bowels constipated, temperature normal.

Nervous System.—Eyes.—Pupils are unequal. The right is larger than the left and reacts badly to direct and consensual light reflex. The left reacts well, and both react to accommodation. The fundi are normal. Special senses, sight, hearing, smell and taste are normal. Facial muscles act normally.

There is general wasting of all his muscles, but individual movements are fairly well performed. His grasps are equal and fair, as are the various movements at shoulder, wrist, elbow, hip, knee, and of trunk and neck. Dorsiflexion of his right foot is weak; all other movements are good.

Reflexes.—Knee-jerk is slightly increased in both legs; ankle clonus absent; plantar reflexes present and give flexor response. Supinator reflex is obtained in right, not in left arm.

Movements.—There is slight unsteadiness when walking a straight line or standing with eyes shut. He attributes this to weakness. There is some ataxy in both hands, especially the left. He touches his nose with difficulty when eyes are shut. He cannot button his clothes or perform finer movements with hands. This is very marked in the left, slight in the right hand.

Sensation.—Tactile sensation is very slightly impaired over the right side of the front of the trunk from the clavicle downwards. The impairment extends down the front of the right thigh nearly to the knee, and down the front of the right arm to the wrist. Behind on the right side sensation is impaired from the calf to the mid-dorsal region. On the left side tactile sensation is normal, excepting that it is much impaired over the front of the left hand and fingers, and over the backs of the middle ring and little finger, and the ulnar border of the back of the hand. Tactile sensation is normal in the right hand. (See diagram I.)

Pain sense is lost (a pin prick being felt as a touch) over the front and back of the right hand, over the back of the right arm, over the whole of the right leg from the ankle upwards, on the right side of the abdomen as high as the costal margin, over the whole of the right side of the back as high as the occiput. It is normal on the left half of the trunk and leg, back and front, and is increased in the left arm (hyperalgesia). It is normal in the left hand (diagram I).

There is, as will be seen in the diagram, considerable dissociation of the affected areas

of tactile and pain sense. Tactile sense is slightly, pain much impaired.

Heat and Cold Sense.—Impairment corresponds roughly with that of pain, but was not carefully worked out.

A month later (December 13th) he complained that he was much weaker on his legs, and that he fell a few days before on trying to rise from stooping position. The pain in his head remains as before, and he says that he has to lie on his right side owing to the "numbness" of the left side of his head. Comparing his condition with that on November 16th, he is much more feeble generally. His pupils are now equal, and react to light, the right more sluggishly than the left. There is no further muscular wasting. His grasps are equal. Flexion and extension of both wrists are weak. Opposition of right thumb and little finger is feeble, as is power to separate right little and ring finger. Knee-jerk is much increased in both legs.

Sensation.—(Diagram II.) The distribution of tactile impairment varies from that made out a month ago, and is less in extent. In front it is now normal on the right arm and on the chest, excepting two small patches shown in diagram. It is slight on abdomen and upper part of right thigh. It is still present on the left hand, excepting the ulnar edge, and is also present on the inner side of the flexure of the elbow. There is a patch of anaesthesia along left ramus of jaw. Behind impairment is present in the left supraspinous fossa and the middle of the left side of the back, also in patches on the right side and on the backs of the fingers and thumb of the left hand. The impairment is not marked, but exists to touch by a camel's hair brush.

Pain sense is lost now over the front of the right arm and leg, right side of abdomen, and in patches on both sides of chest and left side of abdomen, also on a patch on left forearm. Behind analgesia extends on right side from the superior curved line of the occipital bone to toes, excepting the greater part of the thighs and upper part of calf. Sensation to pain is impaired, but not lost, over the back of left arm.

Three weeks later (January 2nd, 1902) I noted—Is weaker, and can scarcely walk alone. The muscles of head, neck and both arms are normal. The ring and little finger of the right hand are flexed on the palm, and cannot be voluntarily extended. The right index and middle finger are extended with difficulty after firmly grasping any object. He cannot abduct the ring and little finger. Opposition of right thumb and little finger is very weak. The

right hypothenar eminence is much, and the thenar considerably wasted. The flexor tendons show on the right palm. There is no wasting of muscles of left hand, but opposition of thumb and little finger is weak. Flexion and extension of both wrists are weak. His temperature is variable, varying from 96 deg. to 99.8 deg.

Sensation.—Tactile impairment has again changed, affecting now the left half of the trunk and neck, etc. (See diagram III.) *Analgesia* has increased in area. (See diagram.)

Three weeks later (January 24th). Has become much weaker; cannot stand or walk alone; cannot raise himself unaided into sitting posture; can do practically nothing for himself. For some time has been much troubled with painful involuntary spasm of both legs, especially the right. Has some difficulty in swallowing, food being taken very slowly.

Eyes.—Right pupil is now slightly larger than left and reacts very badly to light and consensual reflex. Neither react to stimulating skin of neck. Fundi oculi are normal.

On shrugging shoulders, right is weaker than left. He cannot hold his right arm above his head, and his left only with difficulty. He approximates his scapulae badly. There is now some rigidity in both arms, especially the right. The right arm cannot be raised to the level of the shoulder. The grasp of both hands is very weak, especially the right. The fingers of the right hand lie flexed on the palm, which is wasted. The hand cannot be voluntarily opened fully, nor can the fingers be separated. He cannot oppose the thumb and little finger of the right hand, and those of the left only feebly. The right supinator and triceps reflexes are much exaggerated; they are normal on the left side. The right knee-jerk is much increased, and the right leg is involuntarily drawn up with pain to patient on handling it. Ankle clonus is not obtained. Plantar reflex gives flexor response on both sides. The right leg is rather weaker than the left, and dorsiflexion of the right foot is very weak. All muscles react to Faradism. Cremasteric, abdominal and epigastric reflexes are not obtained.

A fortnight later (February 6th) it is noted that he is getting weaker and is now suffering from dyspnoea, the accessory muscles of respiration being brought into use. He has considerable adductor spasm of both legs. Plantar reflex gives extensor response in both feet. There is slight contracture at the right elbow, and right arm can only be moved from the elbow as a fixed point. His grasp is feeble, right knee-jerk is much exaggerated, left knee-jerk is normal.

A week later (February 14th) it is noted that paresis is extending to left arm and leg. Attacks of dyspnoea occur frequently, last about 12 hours, and are relieved by lying on back, aggravated by sitting up.

Sensation (tested on February 12th).—(Diagram IV.) Loss of tactile sensation now embraces the whole of the abdomen and chest as high as the nipples, also part of the left thigh. Sensation has reappeared over upper part of left side of chest above nipple. Left hand is still affected behind, sensation remains practically as when last tested. *Pain sense* is now lost over whole of front of body and limbs. Behind, analgesia extends over whole body as high as superior curved line, with exception of the lower half of left thigh and upper half of left calf. Thermal sensation is affected over whole of trunk, limbs and neck, back and front.

February 2nd.—Weakness in left arm is increasing, as is contracture in right; muscles of right hand and arm are further wasted. Impairment of sensation is much as before.

March 8th.—Weaker; power in left arm much diminished and contracture commencing. Is losing power over sphincters.

March 11th.—Had a severe attack of dyspnoea during the night, necessitating oxygen. Has great difficulty in swallowing, speaking, or in clearing throat of phlegm which accumulates in back of pharynx. Is pale and drawn. Chest moves little on inspiration, notwithstanding efforts of accessory muscles. Platysma stands out and contracts forcibly. Diaphragm moves little.

12th.—Cyanosed and distressed; chest moves little.

13th.—Died suddenly.

Diagnosis.—The history of numbness in the left hand, followed by weakness in the left hand and arm, and later by weakness in the right arm and in legs, and the fact that examination in November showed the presence of marked analgesia—anæsthesia being slight except in left hand, the anæsthetic and analgesic areas being also dissociated—pointed apparently to a lesion affecting the central grey matter in the upper cervical region of the spinal cord. True, there was some neuralgia in the left occipital region, but such neuralgia has been recorded in syringomyelia, and it seemed impossible to account for the marked involvement of pain sensation, tactile sense being but slightly involved, except on the supposition that the patient had either a tumour in the grey matter of his cord, or that he was suffering from syringomyelia.

His subsequent history, the great spread of analgesia, the slight involvement of tactile

sense, the wasting of the muscles of the right palm, the rigidity and weakness of the right arm, followed by a like affection of the left, and accompanied by spastic paralysis of the lower limbs with involvement of the sphincters, the absence of pain, and at last death by bulbar paralysis, all tended to confirm the belief that the unfortunate man suffered from a rapidly growing tumour, affecting primarily the grey matter round the central canal in the upper cervical region, and thence spreading upwards and outwards, producing pressure symptoms as it grew.

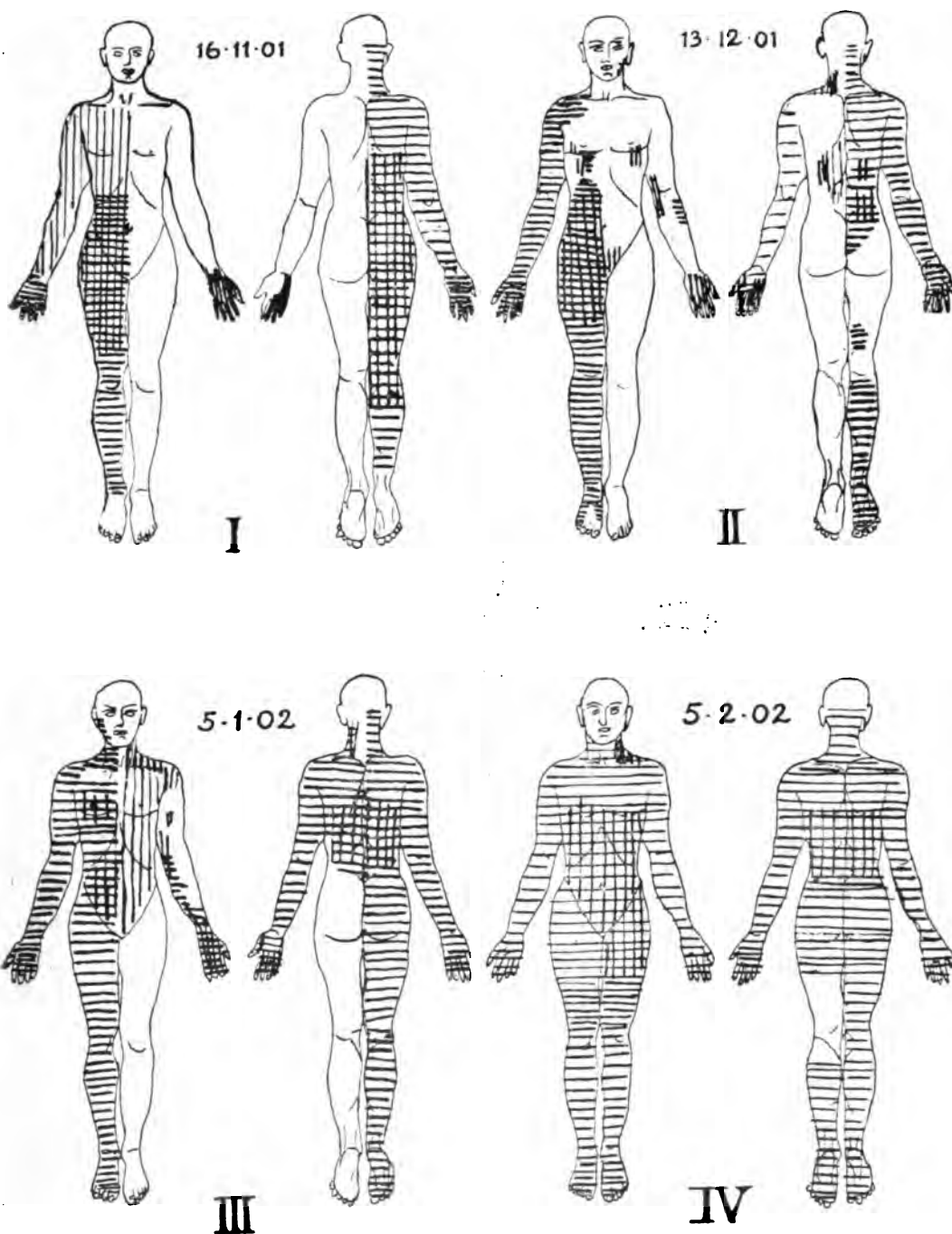
That the symptoms were not due to a tumour outside the cord pressing on it seemed probable, for the following reasons:—A tumour pressing on the cord generally produces considerable pain in the distribution of the nerve roots at its seat, also muscular atrophy and tactile anæsthesia in the same region. Loss of power generally precedes, and is greater than loss of sensation. Paraplegia or hemiplegic rigidity follows in the area below its position. Pain sensation is not affected widely, and apart from tactile. The symptoms in such a case are, in fact, those of steadily increasing pressure paralysis. In this case the early and extensive implication of pain sense seemed to postulate greater pressure on the pathway for painful sensation than on the other sensory tracts, and so to point to the lesion beginning in the central grey matter.

Post-mortem examination revealed the following condition:—Brain and meninges were normal. Attached to the spinal dura mater on the right side, and a little posteriorly about a quarter of an inch below the foramen magnum, was a growth the size of a shelled walnut. It was irregularly bossed, and attached to the dura by a narrow pedicle, and lay free in the subarachnoid space. It protruded through the foramen magnum for about half an inch, lying behind and to the right of the cord, which it compressed in the region of the first and second cervical segments. The cord here appeared somewhat softened. A horizontal section close below the foramen magnum bisected the growth, leaving the lower fragment attached quarter of an inch below to the dura mater and the upper by a fine filament to the medulla. The cord was not invaded by the growth, and beyond softening in the region of the growth appeared macroscopically normal. Section of the growth showed it to be a sarcoma.

The case appears worthy of record as showing that too great reliance must not be placed on involvement of pain sense as a symptom in the differentiation of growths arising within

TACTILE IMPAIRMENT MARKED |||
 ANALGESIA MARKED ≡
 BOTH AFFECTED MARKED ≡≡

... SENSATION TESTED.



TO ILLUSTRATE DRs. SINCLAIR GILLIES AND FLASHMAN'S PAPER ON
 "A CASE OF TUMOUR OF THE SPINAL CORD WITH NECROSIS"

or without the spinal cord. The affection of pain sense out of all proportion to other forms of sensibility was here produced by a growth which simply pressed on the cord from without. The path of pain sense in the cord and medulla is imperfectly known, but experimental and clinical evidence best accord with the assumption that the fibres conveying pain sense pass into the posterior cornu of the same side. Here a column cell is introduced. The path thence proceeds by the deeper portion of the lateral column of the opposite side.

Gowers locates the path in the ventral division of the cerebellar tract on the opposite side to entry; while Mott and others state that painful sensations pass equally on the same and opposite sides. Ciaglinski describes an ascending tract lying between the postero-median column and the central canal, which he considers the pathway of pain and thermal stimuli.

The above case suggests that in the upper part of the cervical cord, either the pathway of pain sense lies more superficially than is usually supposed, or that in this particular region conduction of painful sensation is more readily interfered with by pressure from without than are ordinary tactile or motor functions. You will note that the analgesia at first existed on the right side, and that growth was found on the right side and a little posteriorly. It is, however, unsafe to assume that the position post mortem of a pedunculated growth was the same as that which it occupied during life four months before.

Dr. Flashman has kindly made microscopic preparations from the cord and medulla. In interpreting them it must be remembered that the patient did not die till a month after the last careful examination of his sensory condition.

Pathological Report by Dr. Flashman.—The growth was a round-celled sarcoma.

Spinal Cord.—The nerve cells in all regions were healthy. (Nissel's method). There were a few scattered degenerated fibres in the ventro-lateral white columns, especially in the ventral portion. (March's method).

The medulla showed extensive fibre degeneration affecting almost the whole medulla, probably due to the pressure of the tumour. Both inferior cerebellar peduncles showed well marked degeneration affecting about one-third of their fibres, due, no doubt, to pressure on the direct cerebellar tracts and on the external arcuate fibres. The pyramidal tracts are but little involved. Followed up into the pons the degeneration becomes limited to the region of the mesial fillet.

(Read before the New South Wales Branch of the British Medical Association.)

CONGENITAL HYPERTROPHIC STENOSIS OF THE PYLORUS.

By Alfred Austin Lendon, M.D. (Lond.), Lecturer on Obstetrics and Lecturer on Diseases of Children, University of Adelaide, Visiting Medical Officer Adelaide Children's Hospital.

ON January 17th, 1902, I attended Mrs. W. in her second confinement; the labour was easy and the baby, a boy, was born at full time and seemed healthy in every respect. On February 17th I was sent for, as the infant did not seem to be thriving on the breast milk. I was informed that for about ten days the child had been vomiting and that he seemed to be in constant pain, but that the pain appeared to be relieved by the act of vomiting until he took the breast again; also that, although he was always hungry, he was gradually emaciating, and that he kept the mother awake all night with his crying. There had been no diarrhoea—indeed, there was a little trouble in getting the bowels moved; there was neither blood nor mucus in the motions. On examination, the child was found to have no rise of temperature, the abdomen was not distended, there was no lump to be felt, the knees were not drawn up to the belly. The bowels had not been moved for three days in spite of some medicines which had been administered, but examination of the rectum with my little finger provoked a fairly copious motion of natural consistence, and of a healthy yellowish-brown colour. The vomited matter consisted of merely the contents of the stomach, unmixt at any time with bile. I failed to check the vomiting, or to correct the constipation, with the remedies which I prescribed. For a brief time period the child seemed freer from pain when he was fed by nutrient enemata, and only allowed water by the mouth.

The symptoms were unlike any that I had ever encountered before in the case of an infant. There was obviously no intussusception; the vomiting was not merely that which we so frequently meet with in an ordinary attack of gastro-enteritis; there was no enteritis, and probably no gastritis even; the vomiting suggested obstruction such as we find with pyloric obstruction in adults; the quantity of fluid pumped up each time indicated that the seat of obstruction, if there were any actual obstruction, was at or near the pyloric orifice, and the absence of bile from the vomit showed that it was above the papilla, where the common bile duct opens into the second part of the duodenum. Whilst, however, the anatomical diagnosis seemed fairly easy to arrive at, there was no indication

to guide me as to the pathological condition present in this case. The obstruction might have been intrinsic, as from atresia more or less complete of the pyloric orifice, or from stricture of the pyloric sphincter; or it might have been extrinsic from kinking of the gastroduodenal junction, due for instance to adhesion of the pylorus to the liver or gall-bladder, or to compression by a peritoneal band. An exploration seemed to be the only chance whereby the infant's life might be saved, and therefore it was suggested to the parents as a last resource. After a consultation on February 26th with Dr. A. E. Wigg, who coincided with my views, an operation was agreed to and was accordingly performed that same day at 9 p.m. The infant being very weak, a mere suspicion of anaesthesia was administered; the upper abdomen was opened by an incision in the middle line, whereupon the liver immediately protruded, together with a portion of the stomach, which seemed both dilated and hypertrophied; on introducing the finger the pylorus was at once detected as the seat of a tumour of cartilaginous hardness, cylindrical in shape, and about $\frac{3}{4}$ in. in length; the pylorus was easily delivered through the abdominal wound; the anterior wall of the stomach was then incised near the pyloric end, and the stricture cautiously dilated with various extemporised dilators. The collapsed condition of the patient necessitated a rapid closure of the stomach incision and of the abdominal wound. An hour later the infant had a convulsion, but he rallied and left the hospital, whither he had been sent for the performance of the operation in 24 hours. For a short time there was no doubt the child was able to pass the contents of his stomach on through the pylorus; he was less sick than before; the healing of the abdominal wound was delayed by stitch suppuration. The respite, however, was short, for soon the former symptoms of pain and of obstruction returned, whilst the emaciation became extreme: on April 5th, when 11 weeks old, the child weighed just 7 lb. 13 oz. The parents were very anxious for something more to be done, if it were possible, on account of the baby's constant crying with pain, and on April 7th, with considerable reluctance, I re-opened the abdomen; but, on account of adhesions obscuring the relationship of the structures, any attempt to excise the pylorus had to be abandoned. The next evening the child succumbed.

A post-mortem examination, made 12 hours later, showed that whilst there was no general peritonitis, extensive adhesions had formed between the parietal peritoneum, the transverse colon and the left lobe of the liver, which had

the effect of festooning the colon to the liver, so that only a small portion of the stomach was visible beyond the splenic flexure of the large bowel. The parts were removed entire. The original incision in the wall of the stomach could not be found (this viscus was opened along its greater curvature towards the pylorus, which was also exposed from the duodenal aspect). The stricture, which felt very hard, was $\frac{3}{4}$ of an inch in length and cylindrical in shape, the diameter measuring just $\frac{3}{8}$ of an inch. On the duodenal side it looked very much like a miniature cervix uteri projecting into the lumen of the bowel, but from the gastric side it seemed funnel-shaped. Its mucous membrane was intact and not inflamed. A No. 5 Hegar's dilator could be passed through the stenosed pylorus, but was tightly grasped.

Comments.—I must confess that I had no knowledge of this remarkable disease before I met with this case, nor even when it had been diagnosed that the infant had pyloric obstruction could I find much assistance from text books. The 1200 pages of Starr's "American Text Book of Diseases of Children" contain no reference to it. In Soltau Fenwick's "Disorders of Digestion in Infancy and Childhood" there is rather more than a page devoted to it. My attention was subsequently directed by Dr. Frank Magarey to an excellent article on the subject by Dr. Edmund Cautley in the "Medico-Chirurgical Transactions" (Vol. LXXXII, 1898); and the *British Medical Journal* of May 31st, 1902, mentions that the same writer exhibited a case at the previous meeting of the Harveian Society. In the first mentioned paper Dr. Cautley quoted references to about 20 instances of the disease, and now he states that about 50 more cases have been reported.

I have read several of the original descriptions, and I find that all these cases have a strong family likeness. The children are usually born healthy to all outward appearance, but after a few days they commence to vomit; some even vomit from the moment of birth, still this is unusual; on the other hand they rarely attain to the age of one month before the sickness commences. The vomit is without bile, and the bowels are usually constipated. In one or two instances a tumour has been demonstrated during life. Pathologically, the stenosis has been shown to be due to hypertrophied and contracted circular muscular fibres, rather than to any fibrous stricture.

How comes the pylorus to be hypertrophied? The disease is ante-natal, and the stenosis is relatively enormous; it cannot be attributed to increased work of any sort. It is not easy to

understand the theory which has been advanced that it is a lesion of the nervous system rather than of the muscular—"a functional disorder of the nerves of the stomach and pylorus leading to ill-co-ordinated and, therefore, antagonistic action of their muscular development." According to this explanation of Thomson (*Scottish Medical and Surgical Journal*, June, 1897) the affection is of the nature of a congenital gastric or pyloric spasm. Cautley, with some diffidence, suggests another theory, viz., that it is due to a simple redundancy of foetal growth.

The diagnosis I have already sufficiently indicated. The prognosis is bad, as four months of life is about the average. The only possible treatment is surgical, and it was reserved for Mr. Nicholl, of Glasgow, to achieve the first triumph in this direction by performing Loreta's operation. The patient was reported to be in perfect health eight months after the operation, which was undertaken when the infant was six weeks old (*Intercolonial Medical Journal of Australasia*, 1900, p. 323). Possibly a pylorectomy would be the better procedure, as affording less likelihood of a relapse; but unless the cases can be diagnosed early, and immediately submitted to treatment, the results will probably be somewhat discouraging on account of the exhaustion of the little patients owing to previous starvation and to the shock of an abdominal section.

(Read before the South Australian Branch of the British Medical Association.)

NOTE ON A SPECIMEN OF ECHINOCOCCUS MULTILOCULARIS.—A RARE FORM OF HYDATID DISEASE.

By William J. Munro, B.A., M.D. (Edin.), Sydney.

On the 6th of September last, Dr. Harvey Nickoll, of Mudgee, forwarded a specimen of purulent fluid, asking me to ascertain whether it contained any tubercle bacilli. This fluid had been aspirated from the abdominal cavity of a boy, aged 15 years, suffering from an abdominal swelling.

After an attack of measles, 12 months ago, he complained of a similar condition, for which Dr. Nickoll treated him with syrup of iodide of iron, and under this it completely disappeared. He remained well until six weeks prior to the beginning of September last, when he was again seen by the doctor, who found that the abdomen was again swollen.

Dulness on percussion, and the usual signs of the presence of fluid were found; and in order to determine its nature Dr. Nickoll aspirated

The patient is of Irish extraction, and has never been out of Australia. Twelve years ago he coughed up, or vomited, hydatid cysts. Apart from the abdominal enlargement there were no other signs of ill-health, not even a rise of temperature. The above particulars were furnished by Dr. Nickoll.

The fluid, on examination, was found to be of a yellow colour, and to contain suspended, a number of minute, transparent, gelatinous looking bodies, very exactly resembling grains of boiled sago; in fact, the whole specimen might have easily been mistaken for thin boiled custard containing a small quantity of boiled sago. No tubercle bacilli were found. I examined it for hooklets, but only discovered one after going over 20 large preparations.

Upon teasing out the boiled sago grain-like bodies they were noticed to contain the remnants of a granular endocyst, with a well-marked colloid degenerated ectocyst; in fact, each of these granules consisted of one or more minute cysts, or, what were cysts, mostly sterile, in other words without scolices; the cavities of which had been usually completely obliterated by the cyst wall having undergone a process of colloid degeneration, and consequent thickening. The yellow fluid contained the usual pus corpuscles, together with a fair number of cholesterine crystals.

I telegraphed to Dr. Nickoll, informing him of the nature of the case, and, in consequence, he operated on the 8th, opening the boys' abdominal cavity, with the result that he withdrew one and a half gallons of blood-stained fluid containing an immense number of the boiled sago grain-like masses, and numerous free cysts, varying in size (in the sample sent to me) from a pea to a small mandarin orange; and each of these cysts consisted of the above-mentioned bodies, packed together, and surrounded by an ordinary cyst wall. These had not the hardness which the same growth attains when it occurs in the liver.

The patient progressed without any bad symptoms, and on the 17th the discharge had almost entirely ceased.

Sections were made from one of the smaller cysts, and stained with picrocarmine.

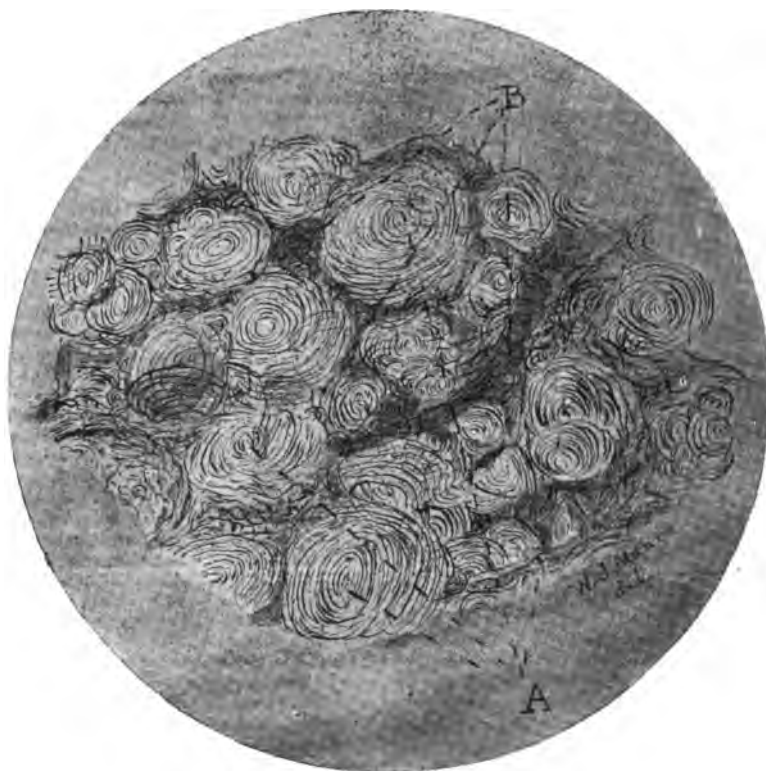
Upon examination they were found to be composed of innumerable minute cysts, packed closely together, and consisting mostly of thickened colloid degenerated laminated ectocyst, with here and there the remains of granular endocyst. The cavities of these were obliterated. There was only a small amount of intercystic stroma. The laminated structure was well marked throughout, and hence the whole field resembled a mass of

large starch granules. Only one ill-defined body, which might possibly be a scolex, was found. The mass was surrounded by a well-developed ectocyst.

The usual site of multilocular hydatid is the liver, and in some respects when it occurs in this situation it differs from the specimen under consideration. For example, there is a well-marked and comparatively thick intercystic stroma, arising, according to Carrière, from degenerated prolongations of Glisson's capsule*; and hence the growth is hard, often of a stony hardness. However, one would naturally

The essential distinguishing features of this variety of hydatid are the presence of transparent or semi-transparent, gelatinous, closely packed masses representing cysts, and the rarity of scolices.

The multilocular hydatid must be distinguished from the more common "loculated hydatid," or "echinococcus racemosus" (Leuckart) which consists of a number of pockets connected with the cyst wall, and all communicating with the main cavity. This phenomenon is due to the resistance to the growth being unequal, and hence the wall projects along the



SECTION OF PORTION OF SMALL CYST.

OBJECTIVE 3 LEITZ, OCULAR 1, CAMERA-LUCIDA, ABBE, PICROCARMINE.

The contents of the cyst are seen to be made up of numerous smaller cysts (A) which have undergone colloid degeneration, and, though it has obliterated their cavities, yet has left the laminated appearance of the ectocyst still distinct. (B) represents the intercystic stroma, which, owing to its thickness, is more or less out of focus; and the magnification is too low to demonstrate its structure.

expect when this variety of parasite grows in the peritoneal cavity that the absence of a comparatively tough membrane, affording the material for an abundant stroma, would naturally result in this stroma being less manifest, and hence the tumour would be of a softer consistency. From the above description it will be seen that this is the case.

lines of less resistance. The multilocular hydatid cysts, on the other hand, are entirely distinct and cut off from each other.†

Because of the confusion likely to arise the term "multilocular" is not a good one, and the French name "tumeur hydatique alvéolaire" is preferable. I would suggest the term "polycystic colloid hydatid" as being still

* "Hydatid Disease," John Davis Thomas, M.D., etc., page 108.

† Ibid.

more descriptive and consistent with its minute pathology.

This variety of hydatid is interesting chiefly on account of its rarity.

*In Europe it only occurs in Bavaria, Würtemberg, Switzerland, and the Tyrol; and a few cases have been met with in the United States.

This particular specimen is interesting for the reason that, as far as I can ascertain, it is the first of the kind reported in Australia; and, furthermore, on account of its rare situation, viz., in the peritoneum. Carrière only records one in this position.†

The usual termination of cases of this sort is fatal, and therefore Dr. Harvey Nickoll is to be congratulated on the successful result of his operation.

A COMPLICATED HYSTERECTOMY: WITH A FEW REMARKS ON THE DESIRABILITY OF EARLY OPERATION IN UTERINE FIBROIDS.

By J. A. G. Hamilton. B.A., M.B., Lecturer on Gynaecology, Adelaide University, Hon. Gynaecologist, Adelaide Hospital.

History.—Mrs. K., *et.* 46. Married two years. No children. Ten or 11 years ago periods commenced to be too profuse and too frequent. Nine years ago noticed an abdominal tumour. This has gradually increased in size. For last few years hæmorrhage has been very profuse, frequently requiring plugging of uterus to restrain it. First consulted me in June, 1902. She was then profoundly anæmic, with a small frequent pulse, and some cedema of feet. Had considerable trouble with defæcation.

On Examination.—The abdomen was filled by a rounded bossy tumour, filling the whole cavity from pubes to ensiform cartilage, and extending out to pelvic brim on each side. P.V. the tumour crowded down into Douglas' pouch, pushing the uterus up behind symphysis. The cervix was like a small teat on the tumour.

Operation.—June 20th, 1902. A median incision was made from symphysis to 4 in. above umbilicus, and pyramidales slightly nicked so as to give room. Trendelenburg position was not used. A folded towel was used to protect and restrain the bowel. Delivery of the immense tumour was impossible, as it was held down by thick restraining bands of pink muscular tissue, developed from the utero-sacral ligaments. Partial delivery was

effected after two thick bands, representing the immensely thickened round ligaments, had been divided, but the ovarians were not secured till the first-named utero-sacral developments had also been divided. They then became more readily accessible, and were secured. (There were no infundibulo-pelvic folds.) The tumour was then pulled over the pubes with sail hook, and the uterine vessels put on the stretch and secured, thus escaping the ureters as they crossed the pelvic floor. The cervical canal was entered from behind, quite close to vaginal vault, a hook placed in the canal, and the anterior wall of the cervix put on the stretch and divided, when the tumour rolled over the pubes, and separated itself from below upwards, from the bladder, thus escaping the ureters at their vesical end, and leaving only a bridge of utero-vesical peritoneum to be divided. On the principle of "*quieta non movere*," a pink kidney-shaped tumour under the left ureter was left alone, as also the flattened and distorted left ovary, which had formed vascular connections with the sigmoid flexure and its mesentery.

In removing the tumour an accidental opening was made in the rectum, at a point where bowel and tumour were firmly connected by a patch of cicatricial tissue formed round an escaped fish-bone which was found embedded in the same. This opening was closed by fine (Czerny) through and through catgut sutures placed transversely so as not to narrow the lumen of the bowel. There was no serous coat at this part of the bowel, hence no Lembert sutures were used. The muscular ring representing the original cervix was closed with catgut sutures, and a wide piece of iodoform gauze packed down in pelvis, and an end brought out into vagina through an opening in posterior fornix. The pelvic peritoneum was sewn over the gauze packing. The gauze was put in (a) to protect the line of sutures in rectum, (b) to act as a drain, and had there been any leakage from the repaired bowel, there was a good get away through the vagina, the general peritoneal cavity being shut off. The abdominal wall was closed in layers, the aponeurosis with buried silkworm-gut sutures at inch intervals, tied in granny knots (so as to keep ends in line of suture) and intermediate catgut sutures. The tumour weighed 22 lb. The patient was a good deal collapsed after the operation, but reacted well to hypodermic injection of strychnine and saline sub-pectoral transfusion. The vomiting was not troublesome, and there was little or no distension. The bowels were kept quiet for eight days, when they were easily moved by a few repeated doses of olive oil. The gauze pack in pelvis was removed on the

* "Principles and Practice of Medicine," Osler, 3rd Edit., page 874.

† "Hydatid Disease," John Davis Thomas, M.D., page 107.

fifth day. Patient made an uneventful recovery, and left the private hospital at the end of a month.

On the evening I showed this tumour before the Association Dr. Lendon showed a fibroid tumour, complicated with a pyosalpinx and peritonitis. The dangers and difficulties attending an operation in these two cases have suggested to me the idea of making a few remarks on the advisability of early operation in fibroid tumours of the uterus. In Dr. Lendon's case a fibroid tumour had existed for some time. She was seen by several surgeons, who had advised against operative measures. When she came under Dr. Lendon's care she was suffering from acute symptoms, which demanded immediate operation. Unfortunately the fibroid was complicated by a pyosalpinx and a localised purulent peritonitis, thereby converting what would probably have been a simple hysterectomy into a dangerous operation, which unfortunately cost the life of the patient. Had this tumour been removed at an earlier date, before the tube became infected, the probability is the woman would be now alive.

Up to a few years ago the traditional teaching concerning fibro-myomata of the uterus was that they were comparatively harmless tumours, that only in exceptional instances do they produce grave symptoms, that the best thing to do was to leave them alone unless hæmorrhage was troublesome, then ergot and other styptics were to be used, and that after the menopause they tend to undergo a spontaneous cure. It is now appreciated that patients suffering from fibroid tumours are subjected to many other risks that arise from the degenerations and complications of these neoplasms—necrosis, cystic and other degenerations of tumour, associated malignant diseases of body or cervix of uterus. Complicating diseases of appendages, such as salpingitis or pyosalpinx (tubercular, septic, or venereal) adhesions, the more remote effects on the vascular, urinary and nervous systems may all cause death or continued invalidism of such patients, independent of the natural history of the tumour itself. The dangerous forms of degeneration occur sufficiently often to be dreaded, and even though these dangers be avoided, the anæmia from the continued hæmorrhage exposes the woman to fatal results from degeneration of heart and kidneys, and the lowered vitality of the patient increases the liability to contract other diseases.

Noble, in the *British Gynaecological Journal*, reports 218 patients operated on for fibromyomata; of these 71 had complications which would lead to fatal issue, 25 had complications which would threaten the life of the patient, 30 had conditions which would lead to more or

less permanent invalidism. These do not include the risks of pregnancy and parturition when complicated by fibroid tumours. Adhesions are a marked feature in these tumours (intestinal, appendicular and vesical); they are often the cause of pain, constipation and disorder of digestion; they undoubtedly, if at all extensive, add to the risk of operation by increasing the mechanical difficulties encountered. The most characteristic symptom of patients suffering from uterine fibroids is anæmia. The risks of shock, septic infection, etc., are all increased in operations on anæmic patients, not to speak of the increased danger from embolism. It is difficult to appreciate the attitude of those advocating an expectant treatment of fibroid tumours; they agree that when a patient has become profoundly anæmic from hæmorrhage, or is nearly crowded out of existence by the size and weight of the tumour, operation is indicated, but oppose it before that state is reached. Surely it would be more logical to operate early, thus preventing the development of a profound degree of anæmia and debility, saving the patient years of invalidism, lessening the immediate risks of operation itself, and very greatly shortening the period of convalescence after operation. Patients operated on when in bad condition greatly swell the mortality of the operation, and also greatly increase the list of those making poor recoveries after operation.

Lawson Tait, in 1886, in speaking of fibroids, says: "The whole gist of modern abdominal surgery lies in earnest and continuous plea for early interference." An excellent work lately published in London by Stanmore Bishop on "Tumours" says: "So much has been said in the past as to the responsibility under which anyone labours who advises resort to such operation as that of hysterectomy that there is danger we may forget the far greater responsibility which rests on those who counsel delay, until an operation which earlier might have been a simple affair has, in consequence of their advice, become a most dangerous proceeding."

The most favourable course that we have a right to expect in any case of fibroid tumour—that is not discharged as a uterine polyp—is that it will produce symptoms not unendurable to life, and that at the menopause it will cease to grow or will atrophy. This comparatively favourable course condemns the woman to a life of invalidism more or less marked during the years which should be the most useful and active of her existence. The menopause is nearly always delayed for 5, 10 or 15 years, or it may be indefinitely postponed; and even after the menopause has occurred, in a certain number of cases, the fibroid, contrary to general

belief, continues to grow and does not atrophy, and may ultimately cause death. Noble says: "If the 218 cases which have come under my observation up to May, 1901, can be taken as representing these growths as a class, it is a fair conclusion that death will result in a third of these cases, that in more than a fourth the result will be chronic invalidism. The percentage of invalidism would be increased by the percentage of cases ultimately ending in death, so that more than half of the patients coming under my observation having fibroid tumour would have been confirmed invalids."

It is gratifying to contrast the results which can be secured through the resources of modern gynaecology with those which would follow an expectant plan of treatment. The mortality of hysterectomy is variously estimated as from 2 to 6 per cent. Kelly reports 307 hysterectomies with 15 deaths, or a mortality of 4.8 per cent.

In a collection by Olshausen of 806 of supra-vaginal amputations, the mortality was 5.6 per cent. Dozen reports 60 cases with a mortality of 2.6 per cent. The only three hysterectomies I have lost within the last two years might have been readily saved had I seen them earlier. The complications in these three cases were:—(1) pregnancy; (2) a neoplasm unconnected with the fibroid situated in the inguinal canal, and its simultaneous removal from outside in a very much broken down woman; (3) an old woman of 60 years who had been 20 years suffering from pain and hæmorrhage with no menopause.

Pan-hysterectomy shows a considerably higher mortality than supra-vaginal or sub-total hysterectomy, no doubt on account of the increased danger from infection from opening the vagina. Martin estimates the mortality of unoperated fibroid tumours, including the degenerations and complications, as upwards of 33 per cent.

From these facts the conclusion is inevitable that the proper treatment of fibroid tumours of the uterus is their early removal. Early operation not only greatly lessens the mortality, but what is of equal importance, it saves the long period of invalidism which is otherwise unavoidable. The danger of operation is much less than the danger to which a woman is exposed from the various accidents which occur in this disease. Consequently, I contend that the only certain remedy is by surgical interference; the delay in resorting to this unnecessarily imparts into the case its most dangerous complications.

There are some cases, however, in which immediate operation is not demanded. In a young woman, with a tumour of small size that

is not causing serious symptoms, operation may be deferred, and the case watched. This is specially desirable if she is anxious to have children. She should be warned, however, that pregnancy is less likely than in the well woman, that she is likely to abort, and that the tumour will grow more rapidly during her pregnancy. Penrose says: "If the tumour, even though small, is intra-ligamentous or of pelvic origin, the expectant treatment is not justifiable: dangerous pressure symptoms are too imminent. If the woman has reached the menopause, if menstruation has ceased, and the tumour is causing no serious symptoms from its size and position, the case may be watched, with the hope that the disease may shortly disappear or become quiescent. Such cases, however, according to the best authorities, are exceptional. Usually the tumour produces symptoms that render the woman more or less of an invalid, and she should not be condemned to the sufferings and danger of waiting."

No drug has been discovered that has any influence over the growth of a fibroid tumour. The treatment by electricity, once popular with some physicians, has not stood the test of time. The uterine arteries have been tied through the vagina with small success. Salpingo-öophorectomy has been practised for a number of years, and a large number of fibroids have been cured by it, but the atrophy after this operation is variable. (I have recently performed hysterectomy in two cases in which removal of ovaries and tubes had been previously done, without any diminution in the size of tumour or in the hæmorrhage.) The operation seems to produce more benefit in cases of hard fibroids, the soft, cedematous fibroid is often unaffected by it, and it is not applicable in the fibro-cystic tumour nor in the intra-ligamentous fibroid of pelvic growth, producing urgent pressure symptoms. In some cases the tubes and ovaries are so situated that they cannot be removed.

Sub-total hysterectomy is deservedly the favourite operation at the present day. The danger of this operation is very little greater than that attending salpingo-öophorectomy. The operation is applicable to every kind of tumour. The relief of symptoms is immediate and certain. The treatment of uterine fibroids has followed in development the growth of abdominal and pelvic surgery. When salpingo-öophorectomy could be safely performed, this operation was practised; and now that hysterectomy is nearly as safe, and more certain in its effects, it has become the operation of election.

A CASE OF ECLAMPSIA.

By R. W. McCredie, M.B., Ch.M. (Syd.) Brewarrina,
New South Wales.

On April 22nd, I was called at 1 p.m. to see a single girl aged 19 years, who was said to have suddenly fallen down in a fit 10 minutes previously. On arrival I was told that "the girl was apparently well yesterday and did the washing at an hotel, that she had been treated for some years for anæmia, and that her sister took hysterical fits."

On examination I found an anæmic girl about eight months pregnant, primipara, lying in an unconscious condition; skin dry and hot, no œdema, pupils dilated, no reaction to light, conjunctival reflex absent, corneal reflex a faint response; pulse 96 full, and of high tension.

Within two minutes of arrival the patient was seized with a typical eclamptic convulsion which lasted two minutes.

An hypodermic injection of morphine, gr. $\frac{1}{4}$, was administered, and the patient was wrapped in warm towels and surrounded by hot bottles. On P.V. examination I found the bladder and rectum empty, and no evidence of labour commencing. The patient did not gain consciousness between this fit and succeeding ones.

At 1.30 p.m. another convulsion occurred, and another hypodermic injection of morphine, gr. $\frac{1}{4}$, was given. From this time on she was kept partially under the influence of CH Cl₃, and within a short time of its administration the pulse became less full and skin moist.

At 4 p.m. had another convulsion, and I commenced digital dilatation of the cervix. At 6 p.m. a convulsion. Os admitted two fingers, so I ruptured the membranes, and could feel the lower edge of the placenta at the margin of the inner os. There was no bleeding. At 7 p.m. saline enema 1½ pints given and retained. At 8.20 p.m. a convulsion; 9.20 p.m. the cervix dilated $\frac{3}{4}$ inch, and I performed craniotomy, and delivered an eight months' child. At 9.30 p.m. the placenta removed by expression. The patient's breathing was much more regular, and not so stertorous as it was previous to delivery. At 10.30 p.m. she had another convulsion, not quite so severe as previous ones. Between 12 midnight and 2 a.m. she had three convulsions, each lasting about one minute.

23/4/02.—At 7 a.m. bladder empty; nurse says, "Patient passed urine under her"; enema given. At 12 noon patient in a semi-conscious, restless state, freely perspiring, pupils widely dilated; 1½ pints of high-coloured urine were drawn off, which gave an acid reaction, specific gravity 1020, and $\frac{1}{2}$ albumen. At 5.45 p.m.

the patient was unruly, and complained that she was blind; urine was drawn off. Pulse, 84; temperature, 98°.

On April 24 her skin was moist, tongue slightly furred. She had control over her bladder, and could distinguish light, but objects appeared blurred. Pulse, 66; temperature, 98°.

From this time she steadily improved, and was quite convalescent by May 7.

Remarks.—The convulsions commenced in the usual way, and affected the usual muscles, as noted in text-books; but a point noted in this case was that the chest walls during the seizure were steadily brought into a position of extreme expiration. Her face at the beginning of the fit was of a greenish-yellow appearance; this changed to a deep cyanotic colour, and the sooner the latter appeared the sooner the attack terminated, the fit being brought to a close by a deep sighing inspiration, followed by stertorous breathing.

In regard to the administration of CH Cl₃, unless the patient was given strong vapour immediately slight twitching of the facial muscles occurred, the fit was not in the least mitigated by its use during the attack.

The pupils were widely dilated, and did not react to light during or for some time after the attacks. Conjunctival reflex was absent during and sometimes between the attacks. Corneal reflex was absent during the fit, but present in the intervals. At no time during the first 12 hours were the pupils noted to be contracted.

The body and cervix uteri contracted strongly during the fits, but at no time did an attack occur during active dilatation of the cervix, although the body of the uterus contracted firmly, and the patient at times showed evidence of reflex action by drawing away from the dilating fingers. At the period of commencing dilatation the cervical sphincters closed firmly on an examining finger, and between the sphincters, which stood out as narrow resilient bands, a zone of relaxed cervical tissue could be felt. The application of a 10 per cent. solution of cocaine on a swab to the cervix for 15 minutes absolutely did away with the irritability of the external sphincter and allowed greater progress to be made with dilatation.

The convulsion which occurred just previous to the operation was so severe that rapid delivery appeared to be the quickest way to quiet an irritable nervous system, and at the same time get rid of a large quantity of any irritant that might be present in the blood of the patient; and as, after the fourth convulsion, no evidence of the child being alive could be obtained, such as foetal movements or foetal heart beat, although these were in evidence

during the early part of the case, there was no moral objection to craniotomy being performed, while there were practical reasons why ordinary forceps should not be applied. Against the use of forceps, was the loss of time which must necessarily have been occupied in attaining complete dilatation of a primiparous cervix, which had already taken over four hours of active dilation to reach three-quarter size. The resistance of the remaining quarter would have taken as long, if not longer, as more force would have been necessary, and much greater care must have been taken to avoid tearing. Again, the passage of the unbroken cranium, plus forceps, must have inevitably led to cervical or perineal tearing, with the risk of future puerperal complications in their wake, as the surroundings of the patient were by no means aseptic.

ACUTE COLITIS.

By F. S. Hone, B.A., M.B., Ch.B. Adel., Morphett
Yale, S.A.

ONE does not usually hear very much about diseases of the colon. The text-books on physiology enlarge voluminously on the secretions of the stomach and small intestine, but have practically nothing to say on secretions of the large intestine. They trace with almost painful eagerness the changes taking place in ingested food, as it passes from the mouth to the cæcum, and then leave it with a confession of ignorance as to what changes actually occur in the large intestine beyond those of absorption. Similarly, one's text-books in medicine discuss in detail the different diseases of the stomach and small intestine, and then leave the matter. I have been struck, during the few years I have been in practice, by the much greater frequency with which one meets with affections of the colon than the space devoted to them in the text-books would lead one to expect. Quain's Dictionary of Medicine deals very briefly with the subject, and has only a passing reference to acute inflammation of the colon. Fagge says little more, and describes colitis as a rare affection. The fullest information on the subject is contained in Hale White's article on "Diseases of the Colon" in "Allbutt's System of Medicine," but the whole article confirms one's belief that the classification of these affections is "still in the making." Under the heading, "Acute Primary Colitis," he describes an affection, the main symptoms of which correspond to the cases that form the basis of this paper. At the same time he seems to include under this heading cases of a much more chronic character (which possibly may result from an acute attack), which last for months before calling for treatment, and lead

to mental depression and neurotic symptoms. As such they seem to me to belong to a separate class in common with membranous colitis and other chronic affections.

It is possible that there are several varieties of acute colitis, and it is a common practice, I believe, to heap these altogether under the name "dysentery," especially when the cases assume the nature of an epidemic. This makes "dysentery" a generic term of wide application. Under these circumstances we will do more good by seeking to separate these various affections than to group them all together. And it is a particular species that has been particularly prevalent during the past two years, and that seems to "breed true" that I want to emphasise to-night.

Up to the latter part of 1900 I had seen three isolated cases that I had diagnosed as acute colitis, as distinguished from the ordinary type of gastro-enteritis, that one is accustomed to see frequently in summer. Two of these were in children about five years old, one in an adult.

In the last week of October of that year I saw a child of two years, who had been taken ill two days previously with slight vomiting, marked feverishness, and speedy onset of diarrhoea. When I first saw the child she was in a somnolent condition, with a temperature of 103°, and a rapid pulse, with occasional paroxysms of pain, slight distension of abdomen, doubtful tenderness, but no lump suggestive of intussusception. Evacuations were occurring from the bowel without undue straining, every 15 to 30 minutes, and consisted almost entirely of masses of colourless or brownish mucus. There had been a little blood passed previously. By next day the temperature had become normal, and remained so for the rest of the illness. The child seemed brighter, with less pain, and motions had diminished in frequency to every two hours; and there the improvement stopped. I dieted her strictly, and tried one form after another of milk or prepared infants' food, gave various astringent and antiseptic drugs by the mouth and by rectal injections, and different forms of opium in increasing doses; yet for five weeks the evacuations continued every two hours with a monotonous regularity that was not only disheartening, but finally exasperating. These evacuations had no offensive odour, and consisted almost entirely of mucus, some almost jelly-like and colourless, some in shreds stained brown or green with bile; some in lumps resembling faecal matter on a superficial inspection. The child gradually passed into a semistupor, wasted till she looked like the pictures of infants in an Indian famine; the skin lost

all elasticity, and several times I thought life could not be prolonged more than a day or two. The only hopeful sign was the way she took all nourishment given. Finally I tried peptonised milk alone and went back to Dover's powders after each evacuation, and simultaneously the child began to improve. To this day I don't know whether it was a coincidence or not. In a week she was passing only two or three natural motions a day, with very little mucus; and in a month she was quite well and has remained so since. Curiously enough, in this case there was no blood passed after I first saw the child; yet as the case went on I could come to no other conclusion than that it was an instance of inflammation high up in the colon.

At the end of the second week of this child's illness a relative came to assist in the nursing, bringing her own infant with her. This baby stayed three days in the house, was not allowed in the same room as the patient, obtained his milk from a different house, used no water that had not been boiled, and had separate utensils for himself alone; yet the day after he returned home he was attacked with a most acute colitis, involving also the rectum; no vomiting, a high temperature for three days, the same rapid pulse and evacuations of bright blood and blood-stained mucus at frequent intervals, preceded by pain and accompanied by intense straining. Horlick's malted milk and Dover's powders after each motion lessened the frequency of the evacuations, but did not diminish the mucus and blood passed. In this case injections of boric acid and hazelin after three or four days undoubtedly improved matters, as was shown by the mucus passed increasing again in frequency and amount when the injections were left off after a day or two, and diminishing again as they were resumed. But here again it was fully three weeks before the passage of mucus ceased.

On the second day of this child's illness the mother had a mild attack of the same trouble, and during the next week three or four other members of the family who had never been near the first case also experienced mild attacks, lasting a few days. Another woman nursing the first case had a slight attack, yet the father and mother, though in constant attendance, and not over clean, and a child two years older than the patient, who was constantly running in and out of the sick room, had no symptoms at all.

Other cases arose that were apparently quite unconnected with the first. Altogether, during November and December, 1900, I saw 13 cases of varying severity, besides hearing of other mild ones. The trouble then appeared to die out in my district as suddenly as it had begun. During February and March, 1901, there was

quite a severe epidemic of the same trouble, only of a more severe type, round and about Willunga, yet I saw no cases in my immediate neighbourhood. During this time, also, similar epidemics were reported at Strathalbyn, and in various parts of Victoria. I saw no more cases till last December, when they began again quite suddenly, and kept cropping up till May of this year. During these six months I saw 26 cases. Since May I have seen none.

Thus, since November, 1900, I have seen 39 cases, as contrasted with three seen during the four years previous. Of these 39 cases, 10 were under two years of age, and 10 over 60 years of age. I do not think that this means that these ages are more affected, but that at the extremes of life one sees mild cases which in vigorous adults do not come under treatment. One often hears of other individuals in a house having had slight attacks of the same trouble.

Whether the illness is mild or not, there are certain characteristic symptoms that have been most constant. The onset is nearly always sudden. A person in absolutely good health is seized with colicky abdominal pains and slight vomiting at first, followed by the passage of two or three loose motions and in a few hours by the appearance of the typical evacuation. There is some feverishness for two or three days, but rarely longer. When once the blood and mucus have appeared they may be passed at intervals varying from a few minutes to two or three hours, according to the severity of the case. There very often is some increase of the pain a little before an evacuation, and there may be considerable straining if the lower bowel is involved, but I have never seen the intense tenesmus of true dysentery. The blood passed is fluid and bright in colour, and never very considerable in amount at any given time. After a few days it tends to lessen and disappear, though at any time afterwards the mucus may be tinged or stained with blood again. The mucus comes away in considerable quantities, either colourless or stained with blood or bile, sometimes in shreds, sometimes like jelly, or in small lumps that resemble faecal matter; but I have never seen anything resembling the membranes of membranous colitis on the one hand, or the sloughs or pus or flesh-like pieces of true dysentery. After the first two or three evacuations the rest are practically odourless, and for long stretches one sees no real faecal matter. I have come to look upon the appearance of true faecal matter as a sign of improvement; one then finds one motion mixed with faecal matter to three or four of mucus alone, and the proportion gradually increases. But even after the evacuations

have got down to two or three a day and are otherwise healthy in appearance, and the patient is gaining flesh, it often happens that one finds three or four weeks later that the mucus has not entirely disappeared and is increased by any marked alteration in diet. Microscopically I have only found blood corpuscles, leucocytes, granular debris, and numerous micro-organisms. I have never found amœbæ, though I have looked carefully in some cases. Hale White says they occur in colitis, but the course of these cases seems quite different from amœbic dysentery.

On examining the patient, one is generally struck with the comparatively clean tongue. Hale White says that the fur is never yellow in this disease, and that the slight white fur serves as a diagnostic. While this is generally true, in one of my last cases (an adult) I remarked the dirty yellow fur on the tongue as unusual, and probably due to accompanying trouble higher up, as vomiting was also more marked than usual.

The abdomen is not usually much distended—in most cases it is rather the reverse; it is generally somewhat tender, often definitely along the course of the colon. In the last three cases I have seen there has been a very definite thickening of the colon to be felt; in two of them about the sigmoid flexure, in one of them about the middle of the descending colon. This last case was only seen a month after his real attack, because of the onset of muscular rheumatism. He was still passing a mass of clear mucus early each morning, and again two or three times during the day. Both the thickening and the passage of mucus cleared up in three or four days with dieting and salicylates for his rheumatism.

The symptoms above described, which have been constant characteristics, serve to distinguish the disease from acute gastro-enteritis on the one hand, and from dysentery on the other. The comparative absence of vomiting and the state of the tongue, combined with the nature of the pains and the evacuations, mark it off from the former; while it differs from true dysentery in the absence of tenesmus and of any sloughs or "washed meat" evacuations.

In some cases in children I have found it difficult to distinguish from an intussusception. This was particularly so in the second case I saw, where but for my knowledge of contact with the previous case I should almost inevitably have gone wrong. Here was a child of ten months suddenly seized with abdominal pains some hours before, with recurring paroxysms when I saw him, and passing blood and mucus; and on introducing the finger into the bowel one felt a mass bulge down into the

rectum just like a piece of invaginated bowel, and increasing with straining. Subsequently in this case when I was using rectal injections I was struck each time by the same thing, and have noticed it since in infants where the inflammation has extended low down and involved the loose mucous membrane in the upper part of the rectum.

In two or three cases in young adults, seen for the first time about the second or third day, where the pain has been severe and, combined with the diarrhoea, has caused a good deal of exhaustion, these two symptoms, added to the feverishness and rapid pulse and tender abdomen, have been suggestive of a peritonitis which the subsequent course of the case has proved to be absent.

An interesting question arises as to the cause of the unwonted prevalence of the disease during the past two years. At the time of the epidemics last year, the suggestion was made that it was the same as the dysentery of South Africa, and that it had been imported here by soldiers returning invalided. But comparing the cases I saw in the Willunga epidemic last year with those I had seen in my own district in 1900, and even with the isolated cases of previous years, I can see no essential difference between them, except in point of severity. And this increased severity is but what one would expect when the disease had assumed a more epidemic form. If that is so, it demolishes the South African theory, as in October, 1900, practically no soldiers had returned. It would be interesting to hear, to-night, from those with recent South African experience, comparisons between the cases they saw there and this affection.

At present it seems to me more probably the same disease that has occurred in sporadic cases in past years and that has assumed a more epidemic form owing to climatic conditions having been more favourable to the spread of the causal agent. It is evidently a disease of the summer and autumn months, and ceases with the advent of cold weather. Remembering that the past two summers have been exceptionally dry and that climatic conditions have been unusual, there is nothing against this; and we know so little of the causal agent that it is impossible to dogmatise.

That the affection is infectious under certain conditions is proved from the cases mentioned above and from experiences elsewhere. In some instances there is evidence of contact with previous cases, though even there how the infection is conveyed is at present unexplained. In other instances a batch of cases have arisen almost simultaneously in neighbouring houses, or in different parts of the district, with no common food or water supply,

or any evidence of contact with a previous case. It is possible, of course, that it may be proved that in such instances mild and overlooked cases of supposed diarrhoea have served as a connecting link.

The patients themselves often ascribe their attack to some unusual article of diet, but the very multitude of supposed offenders is against this. There is no doubt, however, that some severe cases I have seen have been originally mild cases aggravated by improper diet; and this, combined with the fact that several other cases have occurred after a trip to town or change of food or water, would suggest that a mild catarrh may serve as a predisposing cause. This also would serve to explain why only certain of those exposed to infection, and especially new-comers to a particular house, contract the disease.

The question is whether the colitis is due to a specific micro-organism, or whether, with such a lowered resistance in the bowel, one of several organisms may cause the disease. Hale White says it may be due to various organisms or amoebæ, but the regularity of the symptoms and the epidemics that have occurred seem to me to afford a strong probability of these particular cases having been due to a specific organism. The question can only be settled by post-mortem examinations and bacteriological investigation. But the former are very hard to get in private practice, and one has only to read the article in the current (August) number of the *Practitioner* on the bacteriology of the allied "Epidemic Summer Diarrhoea" to see the difficulties that beset the subject.

As to treatment, I shall be glad to hear the experience of others. The chief essential, I believe, is a strict milk diet. I have generally used Horlick's malted milk for youngsters, and milk, rice water and junket for adults. Broths, taken too early, patients themselves have found increase the pain; so does any attempt at too early a return to solid food.

Drugs have not proved satisfactory with me in hastening recovery, with the single exception of opium. I am aware that here I am on debatable ground. I can but record my experience that, given early and in full doses, it undoubtedly lessens pain, reduces the frequency of the evacuations, and by giving rest to the bowel seems to me to lessen the intensity of the inflammation and to cut short the subsequent length of the case. In the later stages it reduces pain and frequency of evacuations, but does not seem to lessen the mucus passed. I always come back to pulv. ipecac. co. as the handiest, and as appearing to me to give the best results. In one grain doses to infants twelve months old, and increasing

doses up to five grains to adults, repeated after each evacuation, I have found evacuations speedily reduced from every half-hour to every three or four hours; and this, combined with the relief of pain and straining, is of undoubted benefit. I have found the greatest benefit in those cases where attendants have literally obeyed instructions, however frequent the evacuations, and have given the powders with a frequency that I myself should have feared if I had been on the spot; and this has been especially noticeable with the acutest cases in youngsters. The supposed ill effects of opium in children I have never seen in these cases. The benefit has been shown by contrast in one or two cases in adults where even small doses of opium or morphia have set up delirium or sickness.

Other drugs have not been satisfactory. I began with bismuth and tinct. catechu, and worked up to full doses without the slightest appreciable effect. I have tried other astringents in turn, but with no better success; and it seems to me the trouble is so far down that the dose of astringent necessary to produce any effect is bound to upset the stomach, while it is usually too high up for rectal injections to be of much service.

Of antiseptics, resorcin and salol have had a fair trial and seemed ineffective. Lately, I have been simply giving acid sulph. dil. and tinct. card. co. as, at any rate, more agreeable. To this I have lately added hazelin in half-drachm to drachm doses, and have had the impression that the mucus has diminished more quickly afterwards; but where the natural tendency is towards resolution it is very easy to be misled in a limited number of cases.

Rectal injections, as I have said, are only of use in a limited number of cases where the lower bowel is involved. Even in these, if the patient is a very young child, the straining set up and the fright to the child almost counteract the good that may result; yet in one or two cases I have seen undoubted benefit result from washing out the lower bowel with boric acid and hazelin.

Notwithstanding these remarks on treatment, the prognosis is generally good. In my 39 cases there were only two deaths. One of these was an old woman, living by herself, who was only seen late, the other an infant of 18 months.

Complications are unusual. The only one I have seen is rheumatism—in the one case mentioned above, of the muscular type; in the other, a definite arthritis in the ankles, knees, and shoulders, with a rise of temperature to 102°, coming on at the end of the first week of a fairly severe colitis. There has been no sign —

of any hepatic trouble in any of my cases. One case occurred in a pregnant woman just about full term, who gave birth a week after her mild attack to a child that had evidently been dead a few days.

The usual tendency is towards resolution in a period varying from a week upwards. In a certain number of cases there seems to be a tendency to lapse into a chronic colitis, and this may occur even in mild cases if untreated. This makes the recognition of an acute colitis of practical importance.

It may seem to some that there is not much difference between the cases narrated, and an epidemic diarrhoea on the one hand and an epidemic dysentery on the other; yet, apart from the differences quoted, an epidemic dysentery, as far as I can learn, is much more fatal in character than anything we have had here. And I confess that the diagnosis of any case as only "diarrhoea" or "dysentery" never seems to me to be satisfactory, especially if made on the lines of the old nurse, who called it "diarrhoea when no blood was passed, and dysentery when there was blood." Nor does it seem to me to be any advance to call a diarrhoea, choleraic, or bilious or inflammatory, or any of the other of the ten sub-divisions of diarrhoea I have seen given in one authority. Whereas if one classes a case as gastro-enteritis or acute colitis, one may not have learnt everything about the case, but one has, at least, decided on the existence of a pathological state, which may afford a basis for rational treatment and pave the way for an increase of knowledge.

(Read before the South Australian Branch of the British Medical Association.)

ACUTE COLITIS.

By H. M. Evans, M.B., Ch.B. (Melb. and Ade.)
Willunga, S.A.

AN epidemic of acute colitis occurred in the Willunga district in the autumn of 1901. From what I can gather the disease is uncommon, at any rate in this State, and references to it in the text-books are very scanty.

To me the disease was different in several respects from anything I had previously seen, and its rapid spread and somewhat alarming nature caused me no little anxiety.

As early as November, 1900, Dr. Hone had spoken to me of some unusual cases of diarrhoea he had met with, but I did not see anything of the kind until January, 1901.

I was then called in to see a child of two years old, in whom there was so much straining and tenesmus that I examined under chloroform for intussusception. There was none present, and the child did very well on Dover's powder.

A month later I saw another child in a similar condition, and used the same drug, but without any benefit. I examined per rectum and felt a projecting mass that I thought was invaginated bowel. I sent this child to the Childrens' Hospital, but under an anæsthetic no intussusception was found. The case terminated fatally, and post-mortem there was evidence of severe colitis.

This child's sister was ill the next day, and got rapidly worse. She looked as if she were going to die, and certainly would have died had I not been fortunate enough to get a trained nurse. She eventually recovered after a long illness. These were both severe cases. The house was nothing but a filthy hovel, and the children were underfed and drank water unfit for human consumption. The room when the nurse took charge was in a very dirty state, and many things were soiled with the motions; and considering this, and the fact that the nurse was on duty for 24 hours without a rest, it is little wonder that she contracted the disease, and that, too, in a very virulent form. In another overcrowded dirty house there were five cases—all but the mother affected—with one death and one very severe case. In six other houses there were at the same time two or more cases. I think from this we may reasonably suspect that the disease is infectious, and that insanitary conditions render the prognosis more unfavourable. In a row of five houses four were infected. Isolation and careful disinfection of the stools and the attendant's hands limited the spread of the disease.

I am at a loss to account for its original appearance. At the time I thought the water had something to do with the infection. Water was then scarce, and the people were getting their drinking supplies from the various creeks and waterholes, which were in anything but a sanitary state. I also thought of the possibility of the infection having been brought from South Africa, but I think the disease is quite different from the dysentery that was common there.

I unfortunately had no opportunity of seeing the state of the colon in the fatal cases.

The symptoms were very uniform in all my cases, the most prominent being diarrhoea, with tenesmus and pain in the lower abdomen. The diarrhoea was very distressing, and gave rise to great pain just before and at the time of evacuation. Each evacuation, too, was followed by tenesmus and a desire to stool every few minutes, but only clear mucus and bright blood passed, both in small quantities. The stool had no offensive odour, and consisted mainly of

more or less altered mucus and undigested food, and, what was very characteristic, little rolled-up bile-stained masses of mucus resembling grape skins or caper berries. Later on the stools had a peculiar putrid odour, but not at all faecal. The flatus passed had the same putrid odour. There was never any faecal appearance about the motions, which, in addition to the above, also contained more or less blood and blood-stained mucus, but never very much. Pain was a most distressing symptom, and had much to do with the rapid loss of strength and great restlessness of some of the patients, particularly young children, who screamed with pain. Tenderness was another symptom of importance; usually the tenderness was most severe over the sigmoid flexure and from there towards the splenic flexure, but in some there was tenderness over the caecal region as well, and these cases were more severe and more lasting than the others.

The temperature was rarely high, usually about from 99° F. to 101° F. Very rarely above 102° F.

Thirst was not marked. There was no vomiting. The tongue was characteristic of colitis, covered with a very white fur, but not a thick fur. Later it became dry and brown, and sordes appeared on the lips and teeth, and the lips and tongue cracked and bled. Swallowing at this stage was intensely painful on account of the dryness of the throat. The exertion of taking nourishment or physic almost invariably caused abdominal pain, followed by an evacuation.

I think this excessive dryness of the mouth and difficulty in deglutition was partly due to the opium and morphia taken.

Bad cases resembled bad cases of typhoid fever, with semi-consciousness, muttering delirium, and disturbed sleep. Hiccough was very troublesome in one bad case, but was not followed by a fatal termination. The abdomen was not distended—usually either flat or concave. Emaciation was rapid, and care had to be taken to avoid bed sores. In one fatal case there was some oedema for a day or two before death. The skin became rough and inelastic, and the hair fell out in anything like bad cases. The pulse as a rule was very rapid. Adults were longer ill than children, but I had no fatal cases in adults. Of 43 cases, 8 were adults. In all there were five deaths, at ages 7 months, 10 months, 3 years, and 11 years. Of these, the boy aged 11 would have recovered, I think, with more careful nursing, so that the prognosis, except for very young children, is favourable.

Dr. J. C. Verco, who kindly saw one case with me, failed to find any amebæ on microscopical examination.

Convalescence is usually slow. Some cases lasted three months, and others were convalescent in three to four weeks. Of the fatal cases, one died in 36 hours (an infant), one in four days, one in seven days, one in three days, and one in 14 days. Some cases become chronic. These suffer from morning diarrhoea, with slimy stools, and loss of strength, but recover on restricted diet—milk diet for preference—and bismuth and pepsin. These chronic cases are often accompanied by considerable mental depression.

Sequelæ.—1. Constipation may be troublesome, and is partly due to the weakness of the abdominal muscles in some cases. 2. Some cases become chronic, especially if the patient gets up too soon, or is indiscreet in diet. I have seen no other sequelæ.

Treatment.—With absolute rest and warmth to the abdomen, bismuth and opium, and careful dieting, the result is usually favourable. It is most important to keep the patient as still as possible; every movement causes an action of the bowels with its accompanying distress. I think I would give bismuth and Dover's powder for preference. Tinct. opii does not seem to act very well. Catechu and other astringents seemed to me not only useless but harmful in that they increased the dryness of the mouth and caused pain in the stomach. Pills of all kinds I would avoid. In one case I gave pill plumbi cum opio, but the pills passed through unaltered. I found morphia hypodermically, even in very small doses, very valuable in checking the tenesmus. Some cases did very well with tinct. opii and ac. sulph. dil. I only tried sulphate of magnesia in one case, and thought it increased the amount of blood in the motions. Starch and opium enemata were in my experience of but little value, and it is impossible to give them to very young children. I found washing out the lower bowel impossible in young children and of no value in adults, but did not give it an extended trial. The diet I prescribed was cold chicken broth, egg albumen water, and barley water. Some had milk, and milder cases milk and arrowroot. I usually peptonised the milk and diluted it, and in most cases it was well borne. Chronic cases have done well with rest and milk diet, and bismuth, pepsin and calumba.

I would classify the epidemic of 1901 as malignant compared with the cases I have seen since. The recent cases have all recovered and have not been ill long. Those who have to do

with mild cases are apt to put reliance on the drugs they employ, and are inclined to think that the disease is readily amenable to treatment. I can but warn them not to be led to this conclusion, for severe cases will be found anything but easy to cope with.

(Read before the South Australian Branch of the British Medical Association.)

CLINICAL AND PATHOLOGICAL NOTES.

WAS HE A MALINGERER?

THE following case of functional aphonia seems worth recording:—A.B., a returned soldier from South Africa, was referred to me by the authorities for a report. He is a fine healthy man, over 6 ft. in height, and about 24 years of age. He speaks in a soft whisper, without making any apparent effort to increase the loudness of the sound. Patient contracted enteric in South Africa. The attack was not severe. During convalescence he suddenly lost his voice, and up to the date of this examination it has never returned. He has not spoken with a phonetic voice for nine months.

On laryngeal examination nothing abnormal, except that the cords do not touch on attempted phonation. Recommended intra-laryngeal faradization, and gave a favourable prognosis. After the lapse of a month the patient presented himself again, and explained that during the interval he had been in hospital for some abdominal trouble, but he had never spoken except in a whisper. His loss of voice had not been treated. Intra-laryngeal faradization was now applied on five consecutive days. The current was strong, but patient stood it well. No sudden return of voice resulted, but after the third application patient was able to produce a vocal note through the nose, with the mouth shut. This immediately changed into a whisper on opening the lips. The next day, by a little persuasion, he was able to articulate the word "No" in a very gentle voice, but the improvement was not to the extent I had hoped for.

On the sixth day I explained that possibly the stimulating effect of ether vapour might improve the quality of the voice, and the patient allowed me to administer the drug, which I did by means of a Clover's inhaler.

During the stage of excitement the patient became very jolly, shook his sides with laughter, and seemed to be thoroughly enjoying himself; but the laughter was all in a whisper. I began to feel that my experiment was a dismal failure, but continued the anæsthetic until the

reflexes were abolished and then watched the patient. On the first sign of returning consciousness I called out in a loud voice, "How are you, old man?" To which he replied in a voice still louder, but of great purity, "Oh, I'm all right, doctor!" I kept him chatting for an hour about the war. Before regaining his self-control entirely he shed a few tears, but whether of gratitude or vexation is an open question. For the next two days the voice remained good, although there was a little redness of the cords and some roughness of speech, probably the stimulating effects of the ether. I then lost sight of the patient.

G. T. HANKINS, M.R.C.S.

Sydney.

TWO UNUSUAL CEREBRAL CASES.

THE comparative rarity of these two cases will, I think, be a sufficient excuse for reporting them.

Case I.—I was called at two o'clock one morning to Miss C., *æt.* 21, who had been brought home unconscious. The history obtained pointed to the conclusion that she was suffering from an overdose of "headache wafer," probably antipyrin or phenacetin, which she was in the habit of taking in large quantities. She was completely unconscious, her limbs were flaccid, and there was involuntary micturition. Soon, however, an alteration took place. The left pupil increased in size relatively to the right, and became immobile. The pulse, which had hitherto been slow and irregular, suddenly became almost uncountable, respiration ceased, and the patient died about seven hours after becoming unconscious. The heart continued to beat for 20 minutes after the cessation of respiration. It then transpired that she had been dancing on the previous evening, had taken a headache wafer before so doing, and that it was during a dance that she "fainted." The post-mortem showed that all the organs were healthy except the brain, whose left ventricle contained about two ounces of blood clot. There was no evident arterial degeneration in any part, no signs of syphilis, and I could not detect any dilatations in the choroid plexus under a low magnifying glass. It is an interesting question whether the headache wafer had any relation to the hæmorrhage, for, though ventricular hæmorrhage is more common in young people than bleeding in any other cerebral site, there was no evident lesion to account for its occurrence in this case.

Case II.—A woman, aged 30, complained of severe pain in her throat and neck, which had followed upon a shivering fit five days before. On examination I found her very ill with a temperature of 105°. Both tonsils were greatly

swollen, and the soft palate and the pillars of the fauces intensely congested. I was not able to find any pus with a bistoury, so I prescribed hot drinks and applications and a harmless mixture. Her "poor but honest" husband asked me not to call again until sent for. Two days later (July 26th) she had a gush of matter from the mouth, and immediately felt easier. On the 31st I was sent for and found her much worse. Her temperature was still 105°, and she had frequent rigors. The throat was difficult to examine owing to the fixation of the jaws, but was distinctly sloughy, and the breath had a gangrenous odour. Energetic treatment was forbidden. Next day I found her general condition little changed, but her face presented a remarkable appearance. The right cheek was enormously distended, and the right eye protruded almost on to the cheek. The extreme chemosis prevented closure of the eye in the least degree. The pupil was dilated and immobile, and the sight was apparently lost. There was no orbital suppuration, the conjunctiva being pale and glistening, the skin clear, and presenting no signs of inflammation. As she had become unmanageable she was removed to the hospital, where she died next day. This appears to me to be a case of infective thrombosis of the cavernous sinus. It is, I think, very seldom seen in connection with ordinary quinsy, even when it is allowed to go on until the abscess is spontaneously evacuated. The line of infection was doubtless along the pterygoid plexus of veins.

F. W. A. MAGAREY, M.B., Ch.M. (Syd.)
Adelaide, S.A.

MIRROR OF HOSPITAL PRACTICE IN AUSTRALASIA.

PRINCE ALFRED HOSPITAL, SYDNEY.

A CASE OF "IDIOPATHIC" PERITONITIS.

(Under care of Mr. A. MacCormick, Hon. Surgeon.)

(Reported by E. C. G. Page, M.B., Ch.M., Hon. Surgeon.)

A FEMALE child, *æt.* 11, was admitted to Prince Alfred Hospital on October 23rd, 1902, complaining of pain in abdomen.

The child had taken ill suddenly on previous day with acute pains in abdomen, specially on left side, accompanied with vomiting; the vomit being greenish in colour, and consisting of ordinary contents of stomach. She had vomited several times. The bowels had been opened twice, stools were loose, foul-smelling

and greenish in colour. The patient was very feverish at onset of sickness. There was no history of her having eaten anything unusual. Temperature, 104°; respiration, 32; pulse, 156 and very soft.

On Examination.—The child was found to be very collapsed, face peaked, drawn and flushed, eyes bright, herpes on lips, skin hot, dry and burning, breathing quick, tongue heavily furred and moist. Throat clear; heart and lungs normal. The abdomen was flat, upper part moved freely on respiration; lower part moved, but not so freely, especially on left side; tender all over abdomen on palpation, especially just to left of umbilicus. It was resonant all over. There was no dulness in flanks. Per rectum nothing abnormal was felt.

The signs being so indefinite, the patient was kept under observation in bed; her bowels were well open after enema, the stool being greenish and foul. She vomited twice during the night. The next morning her temperature was down to normal, and she felt easier, had less pain. The tongue was becoming dry and brown, and pulse was 120. Bowels opened well after enema.

On the next day the patient was decidedly more collapsed. Temperature, 103°; pulse, quick and running, 130; tongue dry and brown; abdomen flat, tender to left of umbilicus; in great pain at times; not vomiting. The bowels were opened again with injection, the stools not so foul; nothing felt per rectum.

Dr. MacCormick saw the patient again and decided to make an exploratory incision into the abdomen. This was made in middle line; pus was found free in peritoneal cavity; flakes adherent to intestines everywhere. The abdominal cavity was washed out with hot saline solution, a rubber drain tube inserted into pelvis, and abdomen closed. The appendix was found to be healthy; no lesion was found in intestines, and the uterine appendages were quite healthy.

After the operation the patient did not rally. She vomited almost continuously; the abdomen became distended, hard and very tender, the pulse quick and weak; tongue dry, brown, and cracked. She died in 30 hours from time of operation.

The autopsy showed the intestines to be more or less inflamed over their serous coats, with a thickish yellow fibrinous exudation in places. About 2 oz. of dirty purulent fluid was found in the pelvis. This purulent fluid was found also among coils of intestine at the epigastrium. The vermiform appendix was quite healthy, and no lesions detected along alimentary tract. No special exudation about liver or spleen. The uterus and appendages healthy. The

liver was pale. Spleen firm, red, and not enlarged. Kidneys unaffected. There was no pleurisy or pericarditis. A few subserous ecchymoses in lungs, but no pneumonic patches.

Films from peritoneal fluid showed numbers of capsulated diplococci, but no other organisms. They retained their stain by Gram's method.

REVIEWS AND NOTICES OF BOOKS.

THE PRINCIPLES OF HYGIENE. A practical manual for students, physicians, and health officers. By D. H. Bergrey, A.M., M.D. Philadelphia and London: W. B. Saunders & Co. Melbourne: Jas. Little.

Owing to the differences in detail which beset the practice of hygiene in different countries, such a manual as this can never have the value in a foreign country which it may possess in its native land. Nevertheless, this volume is not without interest and value to those whose activities lie more or less within the field of public health, even outside of America. It is well up to date in all respects. Its chief defect is a sketchiness of treatment which is almost inseparable from the attempt to cover the whole field of public health in a manual of this size. No book on public health of its size has ever yet come near Whitelegge's little handbook, either in extent of ground effectively covered or in accuracy of statement, and it seems hard to imagine that it can ever be surpassed in these respects. A very useful feature of Dr. Bergrey's book is a resumé of the quarantine laws of the United States. The printing and general get-up of the volume are excellent. W.G.A.

HANDBOOK OF BACTERIOLOGICAL DIAGNOSIS FOR PRACTITIONERS. By W. D'Este Emery. Lewis' Practical Series. London: H. K. Lewis, Gower-street.

This excellent little handbook is one that must appeal to the general practitioner who wishes to make himself acquainted with the more important practical facts of bacteriology as they affect his patients and himself. Written by a lecturer on bacteriology who thoroughly understands the difficulties which beset the early steps in that science, every step is carefully explained. The language used is remarkably clear and luminous, and the methods described are, in all cases where there is any choice, the most simple. Every important point in pathological bacteriology which can concern a practitioner appears to have been dealt with. The book is extremely practical. The methods recommended are not in all cases those which might be pursued by the bacteriologist in a well-fitted laboratory, but rather such as may easily be followed by the country doctor with no more than a well-fitted surgery, a good microscope, and a few of the more indispensable bacteriological apparatus at his command. It is a handbook which should be in every medical library. W.G.A.

THE AMERICAN YEAR BOOK OF MEDICINE AND SURGERY, 1902. Edited by George M. Gould, M.D. In two volumes. Medicine. Philadelphia and London: W. B. Saunders. Melbourne: J. Little. Price, two volumes, 30s.

Although this is called the "American" Year Book, it deals not only with American literature, but contains references to British and European journals as well.

This volume includes references to papers during the past year on medicine, pædiatrics, pathology and bacteriology, nervous and mental diseases, diseases of the skin and syphilis, materia medica, experimental therapeutics and pharmacology, physiology, physiologic chemistry, legal medicine, and public hygiene and preventive medicine. Of course, in the space of one volume it is not to be expected that the whole of the ground indicated has been completely covered, for in each one of these subjects it takes a fair-sized volume to cover the whole of one year's literature. But in this volume before us we have a fair selection of papers on these subjects, presented in a clear and succinct style. It is well printed and illustrated, and has a copious index.

We consider this one of the best of the year books, and confidently recommend it as a valuable aid in the study of any special subject embraced within the departments above specified. G.E.R.

PRACTICAL SURGERY FOR THE GENERAL PRACTITIONER. By Nicholas Senn, M.B., Ph.D., LL.D. Philadelphia and London: W. B. Saunders & Co. Melbourne: Jas. Little.

This book is supposed to deal with emergency surgery suitable to the requirements of the general practitioner and the military surgeon. The greatest latitude is apparently allowed to the term emergency surgery, and the general practitioner who is able to competently deal with all the operative work indicated in this book would be fit to take his position with the best surgeons of his day. However, this is a mere detail, and concerns the title page only. The book is certainly an excellent one, and in completeness and attention to detail well upholds the great reputation of its author. The chapter on antiseptics would, perhaps, be better if it were more authoritative, for it is hardly a good thing for the general practitioner, who does not profess to be able to critically analyse the virtues of conflicting antiseptic methods, to be told that a dozen different methods of sterilising catgut are used by a dozen different men, with whose names and professional value he is totally unacquainted. Great stress is laid upon the mechanical cleansing of the skin and instruments, a matter of great practical importance, and one frequently neglected.

Appendicitis is dealt with very fully and ably. Perhaps it might have been better if in speaking of general peritonitis following appendicitis some stress had been laid on the fact that this very serious complication is not necessarily due to an actual perforation, but it may simply be due to the virulence of the infection, and occur when no actual perforation exists at all. When perforation occurs one is advised to withhold aperients. Aperients would probably fail to act, and if the attack was so severe would it not be better to anticipate the formation of abscess or diffuse peritonitis, for the formation of a localised abscess is a stroke of luck for which the patient need hardly thank his physician. However, these are points on which different opinions might be expressed.

The general impression one gets from reading this book is that the man who wrote it must have had a vast experience, for it teems with emphasised practical points which cannot fail to be appreciated by anyone who is looking for up-to-date information in the very wide field of emergency surgical work.

The book throughout is replete with excellent illustrations, it is very pleasant reading, and altogether is one of the most useful surgical works which has recently been placed before us. H.C.H.

THE AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, 20TH NOVEMBER, 1902.

THE SYDNEY AND SUBURBAN PROVIDENT MEDICAL ASSOCIATION.

THIS Association has now completed the sixth year of its existence, and the report presented to the annual meeting of the profession last month shows its steady progress. Founded originally on the lines of a similar association at Eastbourne, in England, at a time when the profession in Sydney was seriously threatened by medical aid associations, it still flourishes, while its rivals have dwindled down and become practically of no account. It has thus fulfilled one purpose, at any rate, for which it was instituted, in spite of much adverse criticism and opposition from some members of the profession. The working of this Association has proved that medical men can combine for the protection of their own interests, and at the same time confer a benefit on that section of the community which is unable to pay ordinary medical fees.

It was stated that such an institution could only exist by canvassing, and woeful tales were told of the immense injury which would result to private practice. It has been proved that these fears are groundless. Canvassing is strictly forbidden: any collector who is guilty of this practice is instantly dismissed. Moreover, the collectors, even if so disposed, would be unable to compete with the agents of other societies over which the profession has no control, in which there is no restriction as to wage limit, and which offer other benefits in the shape of accident and sick pay and funeral donations. The Association progresses at present largely by its own momentum and by the interest of some few members of the active

medical staff, who lose no opportunity of recommending suitable cases for enrolment as members of the Association.

As in all societies of this class, certain difficulties exist in the way of keeping the members financial on the books. First of all, the members are all of the wage-earning class, whose financial circumstances are variable and who are frequently unable to keep up the small fortnightly contributions. Secondly, there are no benefits conferred except medical attendance and medicine: the Association does not undertake to provide any accident or sick pay or funeral donations. From a financial point of view this is a source of weakness to this Association. Thirdly, the neglect of the patients by some members of the active staff leads to discontent and the loss sometimes of members who have been most regular in their payments.

It has been remarked that the watchword of the profession is "apathy," and that this is true is too well known to those who have been intimately associated with the working of the Sydney and Suburban Provident Medical Association since its foundation. If medical men would only take a little trouble to learn the practical working of this institution they would see that their interests were safeguarded in every possible way, and that they would profit financially if they took an active interest in furthering the Association by recommending suitable persons to join it. From the financial statement it will be seen that over £2500 were distributed to the active staff during the year, the dividend being at the rate of 17s per member per annum. It may be safely said that by far the largest part of this amount has been received from persons who would have been attended under other circumstances as charity patients either at the hospitals or in their own homes. The working expenses are heavy, but they have been cut down to the lowest possible limit, and with a larger number of members on the roll the expenses would be proportionately less.

We would further point out that this Association cannot be considered in any way a rival to the ordinary legitimate friendly societies. As we have already mentioned, the Association makes no provision for any financial benefits, and its members are mostly either too poor to pay the ordinary friendly societies' rates, or are too old to be admitted to them at all. The welfare of the profession in Sydney is bound up with the successful work of the Sydney and Suburban Provident Medical Association, and any medical man who is ignorant of the practical working of this institution should make himself acquainted with it, and join either the active or consulting medical staff.

THE SURGERY OF THE STOMACH.

Two highly interesting and important papers dealing with the surgery of the stomach have recently been read before the Australian Branches of the British Medical Association. Dr. MACCORMICK's paper, which was read at the last meeting of the New South Wales Branch, held at Newcastle, deals more particularly with the technique of the operations of pylorotomy and gastro-enterostomy for malignant disease; and he gives details of some recent cases under his care showing the excellent results of his procedure. Dr. HAWKES' paper, read before the Queensland Branch, deals with the question of gastro-enterostomy for non-malignant disease of the stomach, and he records some brilliant results from this operation. It is satisfactory to know that our Australian surgeons are in no way behind their British and American *confrères* in dealing with cases of organic disease of the stomach, whether it be malignant disease or non-malignant pyloric obstruction due to simple chronic ulcer, with secondary gastric dilatation.

One cannot, however, fail to be struck on reading the reports of these cases with the amount of suffering, discomfort and emaciation

which resulted before any operative procedure was adopted. We cannot help thinking that, to some extent at any rate, this state of affairs resulted from tardy diagnosis on the part of the medical attendants, and the failure to fully utilise all modern knowledge and methods in the diagnosis of chronic gastric disease. If our patients are to be cured, and our surgeons are to get good results, early diagnosis becomes a matter of the utmost importance. Both Drs. MACCORMICK and HAWKES emphasise this point; and while all must admit the extreme difficulties which lie in the way of complete and accurate diagnosis in many cases, there is no reason why every modern scientific method should not be utilised to the full in the early stage of gastric disease, so that we need not have to reproach ourselves with having failed to recognise the condition until it becomes too late to deal effectually with the disease. To wait until a tumour can be felt at the epigastrium is, in the majority of cases, to give the patient no chance of a perfect cure. A careful study of the symptoms presented by the patient, along with a careful clinical examination, should enable one to ascertain the presence, or otherwise, of gastric dilatation. Further chemical examination of the stomach contents after test meals, and examination of the blood, will probably throw some light on the nature of the pyloric obstruction. Persistent absence of free hydrochloric acid, and absence of digestion leucocytosis, are points of importance in assisting one to the diagnosis of malignant disease of the stomach. These and other similar methods of examination should be carefully applied at an early stage in all cases of chronic dyspepsia, which resist ordinary methods of treatment by dieting, drugs and lavage, so that the surgeon may be called in, not, as so often happens at present, as a last resort after prolonged suffering, and when the patient is emaciated and cachectic to a degree, but while he is still in fairly good condition, and there is some hope, if the growth be malignant, of effecting a complete removal.

Another point of importance to be noted is the fact that even if a stomach growth at the pylorus is ascertained to be malignant and too extensive for removal, great relief can be often afforded by the operation of gastro-enterostomy. Patients thus operated on may recover a large degree of health and comfort and survive many months, though the fatal termination must come sooner or later.

How seldom have we to regret early operation, and how often has the surgeon cause to regret the delay of operative procedure until it is too late and all hope of a cure is past? We hope the perusal of these papers will lead to a keener sense of responsibility on the part of the medical attendant for the early diagnosis of organic disease of the stomach, and for recommending operative interference at an early stage in suitable cases.

THE MONTH.

The Newcastle Meeting of the N.S.W. Branch of the British Medical Association.

The last general monthly meeting of the New South Wales Branch of the British Medical Association was held at Newcastle. There was a very large attendance of members resident in Newcastle and district, and the meeting was highly successful. Afterwards the visitors from Sydney were entertained at supper by the medical men of Newcastle. Dr. Beeston occupied the chair, and in welcoming the visitors said the idea of holding a general meeting of the Branch at Newcastle originated with the president, Dr. Rennie. It had been unanimously taken up by the medical men of the district, and he hoped it would not be the last of such meetings.

Secret Commissions.

Some short time ago the question of payment of secret commissions to medical men by chemists was brought before the Pharmaceutical Society of New Zealand. This led to the introduction into the New Zealand Parliament by Hon. Colonel Feldwick of a measure entitled "Chemists' Payment of Secret Commissions Prevention and Rote of Attendance Act." The third clause of Part 2 of this bill was as follows:—"It is an offence for any registered chemist to pay, and any medical

practitioner to receive, by way of commission any money or valuable consideration in respect of any prescription." And the seventh clause: "Every person who commits an offence under this Act, or any part thereof, shall be liable on conviction to a penalty of not less than one pound and not exceeding twenty pounds."

The second reading of the bill was down for August 27th, but when it was reached the Hon. Colonel Feldwick said that at this stage of the session he did not intend to move for the committal of the bill or to proceed any further with it. He was satisfied, however, that a large amount of good had been done by its introduction, and that the discussion which had taken place would have a good moral effect, as marking the act of medical men taking secret commissions from chemists as unprofessional. The order for committal was discharged.

A Crematorium for Adelaide.

The foundation stone of the first crematorium in Australasia was laid last month in the West-terrace Cemetery reserve, Adelaide, by the Premier, Hon. J. G. Jenkins. Among those present were the Attorney-General (Hon. J. H. Gordon, K.C.), who as a private member piloted the bill to provide for the establishment of a crematory through the Legislative Council, and the Hon. J. L. Parsons, M.L.C., who as a member of the House of Assembly introduced the measure into that House in 1891 in behalf of the Adelaide Crematorium Society. The starting of such an institution marks a new method of disposing of the dead in Adelaide, and excited much curiosity.

Proposed Inebriate Asylum.

Sir John See recently laid on the table of the New South Wales Legislative Assembly the papers in regard to the resumption of Milson's Island for the purposes of an inebriate asylum. This is an island in the Hawkesbury River, something like four miles above the railway bridge. Its area is 76 acres, and of these 20 acres are regarded as suitable for cultivation. The island has been favourably reported upon as a site for a home for inebriates, and on May 1st of this year the Government resumed the land for the purpose stated.

Nurses' Hours in Public Institutions.

In reply to a question in the New South Wales Legislative Assembly, whether the Government would see that nurses in public institutions should not be compelled to work longer than eight hours a day, Sir John See replied that in the Hospitals for the Insane the

nurses work as short hours as the nature of their duties permit, the hours averaging 56 per week. At the Coast Hospital the hours at present worked by nurses are as follow:—The gross daily hours are 14, less one and a half hours in every case, or 12½ hours. The latter term is subject to deduction of two hours and of four and a half hours on alternate days. The actual hours of work are, therefore, eight on one day and 10½ on the next, or an average of nine and a quarter hours. If, as is unavoidable in connection with long ambulance journeys, overtime has to be done, it is entered in a book and equivalent time off allowed. In addition, the nursing staff have two days' leave each month and 28 days' annual leave.

Deaths under Chloroform.

The frequency of deaths under chloroform in New Zealand is causing some public apprehension. In a case at Lyttelton some months ago a strong suspicion was raised that the chloroform used had either been originally impure or become deteriorated in quality from being kept some time. The medical witness, Dr. Symes, said chloroform was liable to decompose when kept long in stock, and that in the case under notice there were indications of such decomposition of the anæsthetic. At the instance of one of the members for Auckland city it was decided in the House of Representatives, on September 23rd—"That there be laid before this House a return showing the number of deaths which have occurred in the colony through the administration of chloroform during the ten years ending August 31st, 1902, the return to specify the number of such deaths in each provincial district and the number that occurred in hospitals or other public institutions."

Travelling Allowances and Remuneration of Medical Witnesses at Coroners' Inquests.

We understand that the recommendations submitted by the Chief Medical Adviser to the Government bearing on this matter have been approved of by the Minister, and that the new regulations will shortly be gazetted. The Act of Parliament relating to these payments cannot be altered by regulation. It is as follows:—

Fee for giving evidence at coroner's court ..	£1 1s
Fee for post-mortem examination ..	£2 2s
Travelling allowance after ten miles one way—1s per mile	

The regulations in force up to the present time allow the Chief Medical Adviser to grant special fees in cases only where the total distance travelled is 20 miles. The new regulations reduce the distance to three miles. The amount granted is left to the discretion of the

Chief Medical Officer, who may be guided by the recommendation of the coroner. This appears to be the best that can be done without a new Act of Parliament; but such an Act would be satisfactory only if its provisions approached in liberality those of the Police Act. The bill dealing with this matter, of which notice was given during the last session, but which was withdrawn at the last moment, fell very far short of this standard, and would not have been acceptable to the profession. We shall hope to hear from country members how the new regulations work.

Inspection of Barbers' Shops.

The Board of Health in Melbourne proposes to have all barbers' shops inspected. The majority of barbers in their own interests are careful in the cleansing of brushes, combs, and razors, but there are always careless men who damage themselves and all others in the trade by using dirty tools. The placing of barbers under sanitary regulations is at present a vital question in several countries, and that in some of the American States regulations are already enforced. The idea of Dr. Norris, who reported to the Board of Health on the matter, is to educate the barbers in the best methods of protecting their customers from infection.

The Care of the Consumptive Poor.

In reply to a question by Dr. Nash, it was announced in the N.S.W. Legislative Council that the Government were "still considering" the question of a hospital for advanced cases of consumption. It is now more than 12 months ago since the Premier promised a deputation to place a sum of money on the estimates for this purpose, and since the Hornsby site has been vigorously opposed by the local vested interest, the Government appear to have left the matter severely alone. Meanwhile the Home for Consumptives at Thirlmere is always full. At present there are 42 patients there, that being the full complement of beds, and some 24 patients are awaiting their turn for admission. During the past three months a larger number of patients have had to be refused admission, owing to their being in an advanced stage of the disease, than during any corresponding period of time. The conditions for the admission of patients to Thirlmere Home are that "no patients shall be admitted unless, in the opinion of the hon. examining medical officer, he or she shall reasonably be expected to sufficiently recover to be enabled to resume some light work." These facts point strongly enough to the urgency of the need for a hospital for chronic and advanced cases of pulmonary tuberculosis.

BRITISH MEDICAL ASSOCIATION NEWS.

PROCEEDINGS OF AUSTRALASIAN BRANCHES.

New South Wales.

THE regular monthly meeting of the Branch was held at the Chamber of Commerce, Newcastle, on Friday, October 31st, 1902. Dr. G. E. Rennie, president, in the chair; there were also present—Drs. Beeston, J. Harris, Treloar, Ayres, Eames, Ferguson, Russell, Dunlop, Spark, A. W. Naah, Hocken, Buckley, R. Dick, Meredith, Bean, Begg, Harbison, Horsfall, L. H. Harris, J. A. Dick, Hankins, Crago, Hinder, W. S. Brown, Pockley, Arthur, Barrington, Flashman, R. S. Bowker, Camac Wilkinson, J. C. Windeyer, W. H. Read.

Visitors—Drs. Harwood, G. R. C. Clarke, and Marks.

The minutes of the previous general and special general meetings were read and confirmed.

THE PRESIDENT apologised for the absence of Dr. MacCormick, and asked Dr. Crago to read the paper prepared by Dr. MacCormick, "Notes on Pylorotomy."

Dr. HINDER said he had listened with considerable pleasure to the paper Dr. Crago had just read, and he was extremely sorry that Dr. MacCormick was unable to be present himself. He was afraid that inasmuch as no mention of a microscopical examination of the specimens had been mentioned they must accept the diagnosis with a certain amount of doubt. The probability was that the man who lived for seven years after operation, and who was alive still, did not suffer from malignant disease at all. When they knew that in many instances extremely competent pathologists were unable to arrive at similar conclusions with regard to the precise nature of some of these so-called growths, their diagnosis should be guarded. Clinically, he felt sure that there were many cases in which it was absolutely impossible for any surgeon to say when he had opened the abdomen whether he was dealing with an inflammatory condition or a malignant growth. During the last three years he had had three cases in which malignant disease appeared to be certainly present, but the result showed that that opinion was an incorrect one. He would only mention one in detail. A man was opened up when he was in a condition of extreme emaciation and vomiting continuously. He appeared to have a pyloric growth which had invaded the pancreas, the colon and the liver. The abdomen was closed, and he was carried away by his friends to die. Three weeks after patient returned slightly improved—apparently the examination had eased him somewhat. He opened his abdomen and performed gastro-jejunostomy. Patient left hospital feeling much better. Three months after this same man accosted him in the street. He was carrying a basket of carpenter's tools, and felt as well as ever he did. This was three years ago, and he was well still. He (Dr. Hinder) could strongly recommend the use of spring clamps with blades about 2½ inches long sold as phymosis clamps. These hold the bowel or stomach well, and at the same time stop all hæmorrhage, so that a junction may be established by means of a running suture which stops all hæmorrhage at the same time. By adopting these clamps the intestine is well held and not a single vessel need be tied except by its inclusion in the suture. The method they had heard described to-night was, he thought, the one usually adopted, and certainly an extremely effective one.

Dr. STEER BOWKER said he was pleased that this subject had been brought up, because it gave one the oppor-

tunity of encouraging physicians and general practitioners to bring their stomach cases earlier to the surgeon, for the stomach was one of the most favourable organs to operate upon, and early operations were as a rule most successful, but generally the physician kept the case under treatment until such time as he was sure of his diagnosis, that was until he could feel a growth, at which time it was too late for a radical operation. He was sorry that Dr. MacCormick could not make it convenient to come there and read his own paper, for as he had been able to understand it, his methods seemed very complicated; as far as he could make out he seemed to use three layers of sutures to make his anastomosis, and then to tie any bleeding vessels separately. This all took time and was unnecessary, and what was unnecessary was bad, for in this class of surgery, above all others, speed in operating was an essential, as unfortunately generally the patient was in a very low state from starvation and anxiety, and every minute saved was of importance. However skilled the operator, he could place one row of sutures quicker than he could three. If simple suture was to be used, he thought one could not do better than follow the American plan and use the Connell mattress suture, which was passed from the mucous side and included all the coats of the viscus, all the knots being on the inside, and which could be so placed as to take up any bleeding point. A great many surgeons preferred to close both the stomach and duodenal ends and make a separate anastomosis. With regard to gastro-enterostomy, he had used Murphy's button on many occasions, and it had always proved most satisfactory. He was glad to see that Dr. MacCormick used the anterior method in preference to the posterior method of Von Hacker, but in the diagram shown the limbs looked very pretty, gently curving away from the point of anastomosis, but in practice those limbs became kinked from the drag and formed a spur which prevented the bile from the different limbs passing into the uppercut limb and direct it into the stomach, and resulted in "recurrent bilious vomiting." This was obviated by Roux's method of gastro-enterostomy in conjunction with the gastro-enterostomy; but this again took time, an important factor as regards shock, and could, he thought, be guarded against by the simple device of placing a couple of sutures, one on either side of the anastomosis holding the jejunum to the stomach, and so preventing any kink taking place at the site of the junction. Dr. Hinder's remarks as to whether the cases were malignant or not reminded him of a case he had very similar to the one he quoted. It was the case of a French priest upon whom Dr. Cotton d'Englesqueville asked him to operate; he was extremely ill, had vomited all he swallowed for a long time, and for six weeks had been fed by the rectum; he was extremely emaciated, and very weak, and so low that when he proposed to operate in two days time remarked, "Doctor, could you not do it to-morrow, for if you postpone it I am afraid I shall not be here?" He found a matted mass all round the pylorus and duodenum, with enlarged glands, and inside the stomach near the pylorus, a large, deep ulcer, with thickened and everted edges, with a great deal of induration around it and blocking the pyloric opening. He decided that it was malignant, and too far gone to attempt removal. He did an anterior gastro-jejunostomy by the method he had spoken of with a Murphy's button, and he made a rapid recovery. It was now three years ago this month since he operated, and only a few weeks ago he called on him to say that he was well, had been at work, and was then on his way to Queensland to take charge of a parish. He hardly thought that if this case had been malignant he would be so well after the lapse of three years.

Mr. HANKINS said he would like to draw attention to a method of uniting the cut ends of duodenum and stomach which he had adopted some years ago in a case where the growth being proved malignant the patient was alive and well after three years. The plan adopted was a modification of Maunsell's method of enterorrhaphy. After excising the growth the stomach was carefully opened and wiped out, and a button-hole incision made in the posterior wall about $1\frac{1}{2}$ inches from the cut edge. This opening was drawn to the right until it was over the cut end of the duodenum, which was very fixed. Two temporary sutures inserted at opposite points of the opening were passed through all the coats of the duodenum and stomach, operating from within the stomach. The ends of the sutures were left loose, and on being drawn upwards invaginated the duodenum into the button-hole in the stomach, the edge of the latter becoming inverted so that serous membrane was in contact with serous membrane all round the opening. The permanent stitches were then applied, still operating from within the stomach. One row of interrupted silk at close intervals united the sero-muscular coat all round, and a second, of continuous catgut, the mucous membranes and covering on the first row. The end of the stomach was now closed in the usual way, but without any interruption. One or two reinforcing Lembert's sutures were now applied from the outside as far round the new pylorus as could be reached. The patient was allowed liquid food after 12 hours. The operation may be done very quickly, and had he occasion to do it again he expected it would not take longer than the insertion of a Murphy's button.

The PRESIDENT said he would not venture to discuss the technique of the operations described by Dr. MacCormick, but would like to emphasise the importance of early diagnosis of malignant disease of the stomach. In a case of "dyspepsia" which resisted all ordinary methods of treatment, and in which repeated examinations of the contents of the stomach after test meals revealed an absence of free hydrochloric acid, an exploratory laparotomy was not only justifiable, but necessary in the interest of the patient.

Mr. CRAIG, in reply, said that for all he knew to the contrary these cases may have been verified by microscopical examination; at all events, he thought that most of those present would admit that Dr. MacCormick was capable of diagnosing cancer. He did not think the case mentioned by Dr. Hinder had been proved to be non-malignant, as in a case that came under his own notice where the disease was too advanced to perform pylorotomy, a gastro-jejunostomy was followed by an increase in weight of over two stone. The patient wrote, six or eight months after the operation, stating that "he was quite well, and was able to attend to his duties," still at the end of another six months he died from spread of the disease. In reply to Dr. Bowker, he (Mr. Craig) admitted that to hear the description of gastro-enterostomy it seemed complicated, but to see Dr. MacCormick perform it, it seemed simple and expeditious. As regards the use of Murphy's button, they all knew that the button itself occasionally caused trouble, and even required an operation for its removal; therefore, any operation that did not necessitate its use was to be preferred. Barker, of London, and Dalziel, of Glasgow, have lately published series of cases of gastro-enterostomy for non-malignant disease of the stomach (vide *Lancet*, August 23rd), and both of them use direct suturing, but differ somewhat from Dr. MacCormick in that one suture at least takes up all the coats. The President had wisely called attention to the importance of early diagnosis in cases of cancer of the stomach. On behalf of Dr. MacCormick, he thanked them for the manner in which they had received his paper.

Dr. SINCLAIR GILLIES read a paper on "A Case of Tumour of the Spinal Cord." (See page 554.)

Dr. FLASHMAN also made some remarks on the case.

South Australia.

THE usual monthly meeting was held at the University on October 30th last. Present: Dr. A. A. Hamilton (president) and 25 members. Visitors: Drs. White and McFarlane.

Minutes of last meeting were taken as read.

Dr. LENDON showed—

- (a) A female child, aged 7 months, upon whom he had operated for intussusception ten days ago;
- (b) A man of 30, who had been successfully operated upon for ununited fracture of both bones of left leg, due to hydatid disease of the tibia;
- (c) A placenta which was bilobed, with a marked instance of an "errant" vessel;
- (d) A specimen from a case of intussusception in which the colon had ruptured during the manipulation for reduction of the bowel.

Dr. ANGAS JOHNSON showed the following specimens:—

- (a) Unruptured tubercular pyosalpinges of exceptional size (15 oz. and 5 oz.), removed intact from a sterile married woman, *et. 40*. They were associated with an encysted hydrops, suggestive before operation of an ovarian cyst.

Dr. J. A. G. HAMILTON.

- (b) Unusually long tendons from the Gippsland scrub kangaroo. As suture material Dr. Hamilton has found them more reliable than the catgut he was previously in the habit of using.

Dr. J. A. G. HAMILTON.

- (c) Vermiform appendix from a shearer, *et. 40*. The appendix, although well supplied by blood vessels, its mesentery being intact, had undergone spontaneous amputation, leaving a hole easily admitting the index finger in the caecum, which was closed with catgut sutures and the suture line covered with the mesentery from the removed appendix.

Dr. ANGAS JOHNSON.

- (d) Parchment paper ether bags, manufactured by Mayston and Bugg, of Melbourne. By their use the disadvantages of the unhygienic rubber bag are avoided.

Dr. ANGAS JOHNSON.

Dr. GUNSON showed a boy, *et. 10* years, suffering from ichthyosis dating from infancy.

Dr. A. E. WIGG showed uterus removed by abdominal operation containing large intrauterine fibroid.

Dr. JOS. C. VERCO showed:—

- (a) A case of perforation of the right knee capsule by a small bullet, which had distended the synovial sac with blood, and lodged in the head of the tibia just beneath the articular cartilage at a depth of three-quarters of an inch in the bone. The bullet was extracted five days after the accident. The movements of the joint are perfect.
- (b) A case of transposition of viscera in a young woman. She was left handed. Heart's apex beat inside right nipple. Hepatic dullness of normal limits on the left side. Stomach resonance on the right side. Abdominal aorta beating on the right side of the middle line.

Dr. T. K. HAMILTON exhibited:—

- (a) Sarcoma of the upper jaw in a man aged 57. The disease probably commenced in the antrum and extended outwards through the outer wall of this cavity into the malar bone. Excision of the upper jaw was performed.

- (b) Ophthalmoplegia externa depending on nuclear disease in a man aged 52.
- (c) Cystic cataract in a man aged 42. The lens (exhibited) was removed in its capsule, and is composed of a central nucleus surrounded by soft cortical matter. The whole lens measured 9.50 mm. in horizontal diameter and 6.50 mm. in antero-posterior (polar), and 2.50 mm. in peripheric diameter. The nucleus 7 mm. in diameter. The whole weighed 2.20 dgm.
- (d) A mother cyst removed from back of the orbit by a modified Krönlein's operation. Patient, a woman aged 45.
- (e) Atrophic rhinitis in which artificial inferior turbinates were made with paraffin by Gersuny's method.

Dr. TODD showed :—

- (a) A man whose knee-joint he had drained. The knee was now beginning to get some degree of movement.
- (b) An appendix removed from a woman aged 35. She had had six definite attacks of appendicitis and had always suffered abdominal discomfort. At operation the cæcum had a long adhesion to the anterior abdominal wall. The appendix was twisted round this adhesion and glued to the cæcum again at its tip.

Dr. HORNABROOK then read a paper on "Haffkine's Prophylactic Fluid," which was followed by Dr. J. A. G. Hamilton's paper on "Early Removal in Uterine Fibroids." (See page 562.)

Dr. LENDON agreed as to the dangers of delay in operating for myoma, and illustrated his remarks by instances which had occurred in his private practice of surgical kidney, of peritoneal suppuration, and of cardiac embolism marring his results.

Dr. W. A. VERCO considered that it was better to operate early in cases of fibroid, as medical treatment was practically of no effect. As to the operation of hysterectomy for fibroid, he considered that supravaginal hysterectomy was the operation of choice, as it was attended by less risk than pan-hysterectomy.

Professor WATSON, in discussing Dr. Hamilton's paper, said that Drs. Hamilton and Verco asserted that pan-hysterectomy was more fatal than supravaginal hysterectomy. Dr. Hamilton laid the blame on the open vagina as a path for sepsis. Dr. W. A. Verco attributed the extra mortality to unavoidable hemorrhage, for example, from the azygos artery. He (Professor Watson) suggested that Dr. Hamilton's objection would apply equally well to vaginal hysterectomy, in which, nevertheless, the operative mortality in competent hands was small. As for the azygos artery, he did not even know where it was. He felt sure that Dr. Hamilton also had his doubts about it. Dr. Hamilton acknowledged that this was the case, otherwise in posterior colpotomies he must have met with it. Dr. Hamilton said that the bleeding came from the sides, and not from the median line where Dr. Verco said the artery was. Dr. Hamilton prophesied that surgical advance in the treatment of myomata lay exclusively in the direction of early hysterectomy. He was surprised that Dr. Hamilton had not even mentioned hysteromyomectomy, as they both knew a lady from whom less than four years ago the late Dr. Way removed an interstitial myoma weighing 1 lb. 11 ozs., and 4 associated satellite tumours. A three months fœtus which happened to be there got accidentally pricked and succumbed, but within two months the bereaved mother was again pregnant, and at the present moment could boast of two fine boys aged 3 years and 18 months respectively, notwithstanding the fact that several nodules had unavoidably been left behind in the uterine walls.

Dr. LENDON read a paper on "Congenital Pyloric Stricture." (See page 558.)

Prof. WATSON was surprised that the teachings of Mayo Robson, and Doyen had been ignored by Dr. Lendon, who had not mentioned gastro-enterostomy in his paper. Even at his second operation it was pylorotomy which had suggested itself to his mind. Prof. Watson doubted whether anyone could have removed the pylorus in such a case. He knew that Dr. MacCormick would not have thought of trying, at any rate not when a rapid and easy gastro-jejunostomy was the alternative.

Queensland.

A MEETING of the Branch was held at the School of Arts on Friday, November 7th, Dr. Taylor (V.P.) in the chair, and 13 members were present.

Visitors : Dr. Gullett and Dr. Page.

Dr. TAYLOR exhibited a man with occlusion of the auditory meatus on both sides.

Dr. BROCKWAY exhibited a sling for help in conveying patients from the operating table to the bed, and demonstrated its use.

Dr. FLYNN exhibited—(1) Two teeth intimately adherent, which had been extracted together; (2) gallstones from a cow; (3) hydrocoele fluid, in which cholesterol crystals were seen floating on removal.

Dr. LOCKHART GIBSON exhibited—(1) Photographs of a child suffering from complete eversion of upper eyelids following upon an attack of granular lids; (2) an eye removed with the vitreous chamber full of pus, in the case of which no bad symptoms had supervened; (3) a piece of bone removed from the larynx of a child three days after impaction.

Dr. HAWKES exhibited the specimens collected for the museum during the year.

The Chairman, in congratulating Dr. Hawkes on the excellent nucleus collected from private practice during one year, pointed out that a large amount of material from the metropolitan hospitals would be gained if a pathologist were appointed to each hospital.

Victoria.

THE ordinary meeting of the Victorian Branch was held on October 29th.

In the absence of the president, Dr. Weigall was voted to the chair and six members were present.

The discussion was resumed on Dr. Beckett's paper on "The X-Ray Treatment of Cancer." (See page 450.)

Dr. CUSCADEN considered that Dr. Beckett's paper was a distinct advance in the treatment of cancer, and he noted that all the patients stated that the relief from pain was almost complete. He hoped to see the cases at a later date.

Dr. BRYANT congratulated Dr. Beckett on his success in the treatment of cancer by partial operation and the after exposure to X-ray baths of the parts operated upon. The cases that had been brought before them gave every encouragement to continue the investigations Dr. Beckett had been making.

Dr. FOX said he considered the question of this kind of treatment was becoming a very large one. Dr. Beckett had advanced a theory which may or may not be the cause of the improvement; he was not prepared to contradict or do otherwise at present. The effects of the X-ray bath lasted for a considerable time after it was exhibited, and when a part healed up there was always a considerable loss of tissue, which was always shown by a well-marked depression. Many cases are recorded which have been benefited by the rays, and which have healed and yet recurred; but he thought all cases situated on the superficial surface of the body were

benefited by the X-rays. There was no doubt that the X-rays relieved pain, stopped discharge and removed the offensive smell of cancer; but how or in what way they acted was still likely to be a matter for debate. The theory of the bacterial action of the X-rays had been disproved by all the latest investigations, and it was found not to decrease the growth of bacteria, but to actually increase germs to an enormous extent. Tubercle bacilli, bacilli coli communes, colour-producing bacilli, and many others had a luxuriant overgrowth of germs when exposed to the X-rays, so the theory of destruction of germs by the X-rays is done away with, and the opposite theory, viz., destruction by over-population, is advanced, and it is concluded that the germs are killed off by starvation.

Dr. WEIGALL had been watching a few cases with great interest, and he considered that men who devoted their time and investigation to this subject deserved the thanks of the whole world. All glandular enlargements should be removed and the rays then applied, and, no doubt, better results would take place. There was no question that a very beneficial effect was produced upon suitable cases. He would like to ask Dr. Beckett what happened in cases where there was deep involvement of the glands?

Dr. HENRY, in congratulating Dr. Beckett upon his paper, expressed the hope that he would continue in the path he had adopted.

Dr. BECKETT thanked the members for the kind manner in which they received his paper. He considered that cancer in the earliest stage, and in an accessible position, could be cured by X-rays. He found that all badly ulcerated surfaces seemed to heal, but this did not mean that they were cured, as, unfortunately, the neighbouring glands very often went ahead, and so now he always had the glands removed first before commencing the X-ray treatment. Recurrence occurred in many cases because general infection had taken place before the patients were placed under this treatment. All the cases shown before the Branch on the last occasion were doing well except one of the tongue cases of old standing, in which there was general infection of the system. He then showed two cases, one an epithelioma of the nose which had once been removed and recurred. This case was apparently quite cured. The other case was an enormous rodent ulcer. This had been under treatment for some little time, and was healing rapidly.

Dr. BRYANT then read some notes on a case of suppurating tubercular gland in the region of the appendix.

The discussion of this case was left until the next meeting of the Branch.

Council Meeting.

THE Council of the Victorian Branch of the British Medical Association met on October 8th. Drs. Neild, Weigall, Bryant, Cuscaden and Vance were present. In the absence of the president, from whom an apology was received, Dr. Neild was voted to the chair.

The minutes of the last meeting were read and confirmed.

Correspondence was read from Dr. Moffatt thanking the Branch on their action in his case, and from Dr. Rosenthal, of Woodend. The secretary was instructed to reply.

Dr. Joyce, of East Brighton, was elected a member of the Branch, and the resignations of Drs. Pestill and Moore were accepted.

Dr. HENRY was elected a member of the Council on the motion of Dr. Vance (secretary), seconded by Dr. Bryant. Dr. Henry then arrived, and was welcomed by the chairman and members. He then detailed by means of a report the result of negotiations instituted in

conjunction with Dr. Syme for the purpose of reorganising the Branch, and informed the Council these negotiations had resulted in nil.

On the motion of Dr. BRYANT, seconded by Dr. WEIGALL, it was agreed that—"The action Dr. Henry had taken be endorsed, and a hearty vote of thanks be accorded to him; and, at the same time, that the whole of the report and correspondence should be published in the *Australasian Medical Gazette*."

[COPY.]

Dr. HENRY'S REPORT.

Melbourne, October 1st, 1902.

The President of the Victorian Branch of the British Medical Association.

Dear Sir,—I have the honour to report that some months back I attempted to enquire if it were possible to reconcile the estranged elements of this Branch. I thought it possible that when personal feelings and resentments had become modified by time that some conditions might be suggested which would promote better feeling and remove hostility, and enable us, if possible, to mediate with those who had withdrawn themselves from this Branch. Without having any official connection with the Council, I addressed myself to Mr. G. A. Syme, whom I considered as the one most likely able to represent the opinion and feelings of those who have separated themselves. Him I regarded by virtue of his personality to be most likely to have some control in influencing his friends. He seemed to me to be willing to enter into my self-imposed mission. Throughout the proceedings he has made me feel that he is in sympathy with its objects. He explained at the first meeting that the retired members would refuse to consider any proposal of reunion unless the Home Association were prepared to grant autonomy to its Australian Branches. With the view of bringing this about I induced him to embody his views in a letter which I was to forward, with one of my own, to the editor of the *British Medical Journal* for the purpose of obtaining his influence in having the matter discussed and granted by the Home Council. Until a reply had been received all further negotiations were considered suspended. I must say here that from the tone conveyed to me by Mr. Syme I had some reason to hope that he gave expression not only to his own views, but also to the feelings of some of the other members of the late Council. Mr. Syme fulfilled his promise, and wrote me a letter which, in conjunction with one of my own, containing an exhaustive description of the state of affairs existing in the Victorian Branch, I forwarded to London. To these letters I received two replies, one from the president of the Council of the Home Association, and one from the editor of the *British Medical Journal*, both of which are appended to this report, and in which you will see that the whole of the demands made have been conceded, and, furthermore, that the Home Association seems to be particularly desirous of preserving a friendly attitude towards ourselves, and a desire that the breach should be healed. This correspondence was handed to Mr. Syme, and he at once offered to take steps to test the feeling of the members of the old Council. He at once called a meeting of the members of that Council, and subsequently communicated to me the information that very few of the members attended that meeting; that he then issued a circular to those who were absent, in which they were invited to express their views on the situation. It appears as the result of his efforts that the members of the old Council have finally refused to consider any steps towards a reconciliation, and that they have also resolved to decline consideration of any proposal towards that object. An offer was made by

me previous to the determination of the old Council, that I was prepared to state authoritatively that the present Council would resign *en bloc* and would reinstate the members of the Council. When this offer was rejected I explained that I was prepared to receive a proposal that the present Branch should be dissolved, and that three trustees should be appointed, one of whom would be Mr. Syme, and that the Branch might be reformed under the auspices of the old Council. The outcome which Mr. Syme thought might possibly be received by the members of the old Council was that the whole of the Branch be dissolved without any appointment being made, and that a fresh charter to establish a Victorian Branch should be issued to them direct from London. This proposal I considered altogether impracticable, as the whole machinery of the Branch would be destroyed, and no provision could then be made for taking charge of the assets; besides which, I considered the demands too exacting, and quite out of proportion with the occasion, and one which I could not in honour propose to the present members of the Branch. I am sure that we all regret that it has not been possible to remove the very unpleasant conditions which have now existed for some time. We have shown a desire to re-establish a friendly relationship with our recent members, and the sincerity of this object has been shown by the various offers which we have made, and which I think should satisfy any reasonable person that we have as much interest in maintaining the honour and the respectability of the profession as our seceded members have. We can only hope that time will ultimately enable us once more to become effective in our exertions and permit us to promote our professional interests by mutual co-operation.

I have the honour to be,

Yours truly,

LOUIS HENRY, M.D.

[ENCLOSURES.]

THE EDITOR OF THE BRITISH MEDICAL JOURNAL TO
DR. HENRY.

June 24th, 1902.

Dear Dr. Henry,—I have shown your letter, received a short time ago, to Dr. Roberts Thomson, the president of the Council of the British Medical Association, and I enclose you a copy of a letter which he has sent me in reply. You will see that he there defines the position of the Council in the O'Hara case. I know that the proper treatment of the matter caused the greatest anxiety here, but the receipt by cable of the information that Mr. O'Hara had resigned was held to prohibit further action in the matter by the Central Council. The new articles which were printed in the *Journal* of May 24th, and again in the *Journal* of this week, June 28th, contain special clauses (XLIH and XLIV) dealing with this point. By XLIV (b) complete autonomy is given to the Branches out of the United Kingdom on this point. Further, if you look at the by-laws you will see that under by-law 10 each Division and each Branch will have complete autonomy, subject, of course, to the general principles embodied in the Articles of the Association. The intention has been to put general principles into the articles, which are only altered with difficulty, and subsidiary matters into the by-laws, which can be more easily modified to meet difficulties which may be discovered in the working or in changing conditions. The provisions with regard to the representatives of Australian Branches on the Central Council are contained in by-laws 24 and 25; the latter you will observe leaves the eligibility for election as a member of the Council to be determined by the rules of the Branch. Finally, by by-law 39 (4) an Australian Committee is to be formed; the majority of its members must be repre-

sentatives of Australian Branches, and to it all questions affecting such Branches will be referred. It seems to me, then, that the objections, which, as you mention in your letter, have been made to you with regard to the attitude of the Association at Home towards the members in Australia, are shown by these clauses in the new regulations to be groundless. You are, of course, at liberty to make use of Dr. Roberts Thomson's letter, or this if you think that they can help to remove any misapprehensions which may exist.—Yours faithfully,

DAWSON WILLIAMS.

June 18th, 1902.

DEAR DR. DAWSON WILLIAMS,—The letter from Dr. Louis Henry, which I have seen through your courtesy, has received to-day the reply which he would most like to have. The new constitution, which the Association accepted to-day in general meeting, gives the fullest autonomy to the Australian Branches, and the difficulties to which Dr. Henry alludes will not arise under the new regulations. One's earnest hope is that the result of these new regulations will be to bind the Branches still closer to the parent Association. That, I am sure, is the earnest wish of all who have been working at the new scheme. To one or two points in the letter I should like to advert. There need be no difficulty as to the members at present unattached. If they do not desire to enter into the work of the Branch or attend its meetings they need not do so. Their position will be just what it was yesterday, except that they will have to pay a slightly increased subscription. The attitude and action of the Home Council in the O'Hara case has been very much misunderstood. I myself caused a telegram to be sent to Melbourne to make the position quite certain. We were informed that he *had* resigned, and according to the rules, as they stood, we were powerless. In the future this could not happen. A member will not be able to resign while his conduct is under review. The regulation providing for this was largely due to the dissatisfaction felt by the Council as to their position and powers in the O'Hara case. With regard to the attitude of the parent Council and Association towards the Australian Branches, the letter completely misinterprets the feeling. We desire in the strongest way to have the bonds drawn closer and made more enduring.—I am, yours very faithfully,

(Signed) J. ROBERTS THOMSON,

President of Council, British Medical Association.

The Council of the Victorian Branch of the British Medical Association met at 21 Spring-street on October 19th. Present: Drs. McCann (president), Willis, Henry, Cuscaden, Vance, and Bryant. Apologies were read from Drs. Neild and Weigall.

The minutes of the last meeting were read and confirmed.

Dr. ROSENTHAL, of Woodend, proposed by the secretary and seconded by the treasurer, was elected a member of the Branch.

Dr. WILLIS moved and Dr. CUSCADEN seconded the proposal that Messrs. Braham and Pirani be appointed honorary legal advisers to the Victorian Branch of the British Medical Association.

The secretary was instructed to write to the Sydney Branch of the British Medical Association for information with regard to their Medical Defence Association.

Ballarat.

The ordinary quarterly meeting was held at Ballarat Hospital on Thursday, October 30th. Present—The president (Dr. W. Beattie Smith), Drs. Bennett, Gardiner, Hardy, Jordan, Lawrie, Martin, Mitchell,

Morrison, McGowan, Naylor, Richards, Steall, G. Affeck Scott, R. Scott, and Usher, with Drs. Ulbrick and Rees as visitors.

Apologies were received from Drs. Champion, Courtney, Davies, Salmon, and Sleeman.

The minutes of the previous quarterly meeting were read and confirmed.

Accounts amounting to £21 9s were passed for payment.

Correspondence was received from the St. John Ambulance Association and the Editor *Australasian Medical Gazette*.

BALLOT FOR NEW MEMBERS.—The following gentlemen were declared to be unanimously elected:—Leonard Ruscoe Steele, L.R.C.P. and S., Edin.; L.F.P.S., Glas., Lyons Street, Ballarat; Walter Blake Nisbet, M.B., Ch. M., Edin., Creswick.

Dr. C. H. W. HARDY read a paper, "Surgical Gleanings," being a resumé of his recent observations in the hospitals of Great Britain and America.

Drs. R. SCOTT MORRISON and NAYLOR took part in the discussion which followed, and congratulated Dr. Hardy upon the clear description which he had given of so many interesting points.

Dr. GARDINER, who had also recently returned from Europe, gave interesting details of operations for prostatectomy as performed by Hurrey Fenwick and Freyer. He also briefly described the general construction and arrangement of some of the newest hospitals and their special methods of sterilisation and asepsis.

Dr. HARDY, in replying, spoke of the extreme simplicity of the American operating theatres as compared with European.

Dr. USHER was to have read a paper, but withdrew it on account of the lateness of the hour.

Dr. DAVIES' notice of motion relating to paying patients in hospitals fell through in consequence of his absence from the meeting.

Dr. RICHARDS' notice of motion to regulate granting medical certificates to lodge patients lapsed for want of a seconder.

Dr. R. SCOTT moved—"That a scale of mileage fees for country journeys be decided upon."

After some discussion, in which the difficulty and unfairness of a uniform scale were pointed out, Drs. R. Scott, Mitchell, Hardy and Morrison were appointed a sub-committee to consider the question and bring up a report to the annual meeting in January.

Dr. CHAMPION moved—"That members be requested to supply names to the hon. secretary for a 'black list' of non-paying patients, to be circulated privately among the members." This was carried unanimously, and the hon. secretary was instructed to compile and circulate the list.

The Hon. Secretary reported that subscriptions amounting to £25 had been obtained towards the Pincock Memorial Fund. It was decided to endeavour to raise £30 before closing the fund.

Dr. ULBRICK, senior resident surgeon of the hospital, exhibited the following specimens:—

1. Multiple abscesses of liver and soft stone impacted in common bile duct. Fresh vegetations on mitral valve, breaking down at base (Dr. Morrison).
2. Dry gangrene of toes—amputation in lower third of thigh (Dr. R. Scott).
3. Carcinoma of liver (Dr. R. Scott).
4. Epithelioma of cervix uteri—vaginal hysterectomy (Dr. Mitchell).
5. Large ovarian fibro-cystic tumour (Dr. Mitchell).

Dr. J. M. GARDINER exhibited under microscope sections of carcinoma of liver and epithelioma of uterus.

The meeting then closed.

THE BATTLE OF THE CLUBS.

Victoria.

At a meeting of the Hawthorn Branch (which comprises the districts of Hawthorn, Kew, Camberwell, Canterbury and Surrey Hills) of the Victorian Medical Defence Association, held at the residence of Dr. J. E. Andrew, on the evening of October 22nd, the following medical practitioners were present:—Drs. Stone, Barrett, Loughrey, Kerr, Seilleaux, Henderson, Boake, Brown and Andrew, of Hawthorn; Drs. Walsh, Argyle and Cowan, of Kew; also Dr. Halley, of Kew; Dr. Armstrong, of Canterbury; Dr. Gandevia, of Surrey Hills; and Dr. Officer, of Melbourne, who is secretary to the Victorian Medical Defence Association.

Dr. Walsh was voted to the chair, and Dr. Officer addressed the meeting with reference to the formation of women's lodges in Melbourne and its suburbs. He said that the Australian Women's Association had been formed under similar conditions as the Australian Natives' Association; that he thought it really was a political organisation under the disguise of a friendly society, the object being to prepare for women's franchise and so organise the women's votes. Other friendly societies had formed women's branches—Hibernians, Foresters and Rechabites. The rates paid varied from 6s to 10s; but he thought that all female lodges should pay similar rates as male lodges, and that if the members of the Hawthorn Branch were united they could obtain those rates.

Dr. Andrew, in order to discuss the question of the rate of payment for women's lodges, moved the following resolution:—"That in the opinion of this meeting 10s a year for single members and 12s for widowed members is a fair remuneration, provided no abuse in admitting members is allowed to take place." This was seconded by Dr. Boake, who said that 10s a year for single members was much better than 14s for a man, wife and, say, three or four children. An amendment to the motion was moved by Dr. Gandevia, and seconded by Dr. Henderson—"That no women's lodges be taken under a similar price to that paid by men's lodges." This was spoken to by different members, and when put to the vote was carried by a majority of 14 votes.

Dr. Andrew moved the following motion with reference to the meeting of homœopaths or those who countenance homœopaths:—"That in the opinion of this meeting no medical practitioner who practises as a homœopath, nor any practitioner in partnership nor acting as *locum tenens* to any homœopath, be met in consultation or in any way be recognised professionally; also that any members of the Victorian Medical Defence Association have the professional right to refuse to meet any regular practitioner who breaks this rule." This was seconded by Dr. Argyle, who spoke forcibly in favour of the motion and asked if the giving of an anæsthetic for a regular practitioner in a case of emergency (the practitioner being in the habit of meeting homœopaths in consultation) could be called a consultation. The motion was supported by all the gentlemen who spoke, and with reference to Dr. Argyle's question it was generally thought that a man must be guided by his own judgment, but where another homœopath could be obtained, and except in the matter of life and death, no regular practitioner should in any way countenance any other regular practitioner who was in the habit of meeting homœopaths, and if in any emergency case he did act, he should retire as soon as his services in the emergency were ended, and explain his action both to the homœopath and to the patient, or his relatives or friends.

REVIEW OF CURRENT MEDICAL LITERATURE.

MEDICINE.

SEARS and Lord (*Boston Medical and Surgical Journal*, September, 1902) discuss the symptoms and treatment of cirrhosis of the liver in the light of 78 autopsies. While other points are incidentally considered, the special object of this analysis was to determine how far the most marked symptoms which have been attributed to cirrhosis of the liver were due to the anatomical condition of the liver *per se*, and how far they were dependent on associated changes in other organs. The attempt has also been made to determine in what class of cases, if any, surgical interference, whose only object is to overcome portal obstruction, was most likely to prove successful. Etiologically, alcohol was the most important factor, for in only nine was alcohol denied. Malaria, syphilis, and gallstones appeared to be the most important of the remaining causes of this condition. The authors sum up their conclusions in the following sentences:—

Hepatic cirrhosis is, in a majority of instances, but one expression of the effect of a systemic poisoning. The degenerative changes in other organs are to be regarded as part of this general process rather than as complications.

The splenic tumour and dilated veins are due in part to portal obstruction, but also seem dependent on the underlying toxic cause, since they are occasionally associated with slight hepatic changes.

Dilatation of vessels may have some effect as a compensatory mechanism, but is rarely adequate to prevent ascites.

Persistent jaundice and hæmorrhage from the digestive tract seldom occurs until the connective tissue formation is well advanced.

Hæmorrhage was found to be almost invariably due, when a full pathological description was given, to some gross lesion, which in most cases was an œsophageal varix.

Ascites was, as a rule, a late symptom. Its early appearance was, with rare exceptions, associated with some form of peritoneal inflammation.

Continuous fever was never found, except in the presence of complications. A brief elevation of temperature occasionally occurred, for which no cause could be discovered.

No evidence was found to show that the course of the disease was not always progressive, but a high grade of cirrhosis was sometimes reached without incapacitating the patients.

Surgical treatment may be indicated in a very small proportion of cases, but conclusive evidence is still lacking to show that the ascites in the cases successfully operated on was due to hepatic cirrhosis and not to coincident conditions.

Acute Hæmorrhagic Polymyositis.

Thayer (*Boston Medical and Surgical Journal*, September, 1902) discusses this subject, and gives the notes of a case observed by him in Baltimore. Only during the last 15 years has attention been drawn to the subject of myositis apart from trichinosis. Lorenz has divided the cases into four groups—1, dermato-myositis; 2, polymyositis; 3, polymyositis in association with erythema multiforme; 4, a number of unclassified cases. Lorenz describes polymyositis hæmorrhagica as a disease whose onset is more sudden and accompanied by rather less

fever than the other forms of the disease. In most instances the onset is associated with the development of a relatively small nodular tender area, generally in one of the muscles of the extremities. This is rapidly followed by more or less extensive œdema. The skin may show an hæmorrhagic or measles eruption, while later a yellowish green discolouration may give evidence of the presence of deeper extravasations of blood. The muscle disease as such, that is the inflammatory affection of each separately diseased muscle, represents a more or less individual process which runs its course independently of the inflammation in other muscles, and affects the general condition of the patients, either because of the implication of vital muscles, or as a result of the greater number of muscles affected. Lorenz emphasises the frequency of affection of the heart muscle. In some instances marked atrophy may follow on the acute symptoms. The etiology is uncertain, but its association in a number of instances with other infectious processes, together with the fever and severe constitutional symptoms sometimes observed, has suggested its probable infectious origin. Thayer's case is as follows: A man, 34 years of age, married, had suffered for 15 years from what he called "rheumatism." He had been dissipated in his youth, and had had gonorrhœa at 20 years of age. Some two years previous to being seen by Thayer, while doing some heavy lifting, he "wrenched" his arm, and "it appeared as if the joint in the shoulder had jumped out of its socket." There was no pain, but the whole arm became greatly swollen. The upper arm was hard and of a purplish colour, "looking as if a vein had burst." This all cleared up after three or four days. Six months later another similar attack occurred. About a year after this he felt a slight snap in the dorsum of the left foot. This was followed by œdema of the foot and leg. This also passed off in the course of a few weeks. A similar condition again recurred in the right arm, and it was in this attack that he was seen by the author. He found him to be a healthy-looking man, of good colour, and with a normal temperature. The right arm and shoulder were considerably swollen from the shoulder to the elbow, and limited almost entirely to the bicipital region. The posterior part of the deltoid, and also the pectoralis major on the right side, showed a swelling. The biceps was apparently greatly enlarged, standing out as if in marked contraction. The skin over it was tense and somewhat reddened. About 6 or 8 cm. above the elbow there was a transverse purplish discoloured area about 4 by 1 cm. in extent. In the axilla and around the pectoral fold there was a distinct yellowish green discolouration of the skin, suggestive of deep hæmorrhage. The triceps was normal, but the infraspinatus and teres muscles were very prominent on both sides. The thoracic and abdominal viscera were normal, and an examination of the urine and the blood did not reveal anything of note. A portion of the biceps muscle was removed, and sections of it were prepared with various stains. No muscle was to be seen anywhere in the section; there was beneath the fascia a great new growth of tissue, the main mass consisting of cells of the type of embryonic connective tissue cells, with numerous new-formed blood vessels. Both in the connective tissue cells and in the walls of the vessels mitotic figures are very abundant. This tissue, as well as the overlying subcutaneous tissue, was evidently œdematous and full of hæmorrhages. Subsequently the muscles affected showed a certain amount of atrophy and lost their power of response to the Faradic current; but the patient had had no further acute attacks of hæmorrhage or pain in the muscles. The future alone can answer for the ultimate prognosis.

Persistent Hereditary Oedema of the Lower Limbs.

H. D. Rolleston (*Lancet*, September 20th, 1902) reports two cases of this nature which he had had under his care in St. George's Hospital. The mother, aged 45 years, had suffered from persistent oedema of the legs for 35 years; no other member of the family was affected. There were seven children in the family, but only two of them presented the condition of persistent oedema in the legs. There was no puffiness of the face, hands, or any part of the body except the lower extremities. No recognised cause for oedema was forthcoming. Examination of the heart showed nothing abnormal; there was no anæmia, the number of red corpuscles being 5,800,000 per cubic millimetre. The urine was absolutely normal; there had never been any hæmoglobinuria, and there were no signs of pressure on the inferior vena cava, or of lymphatic obstruction, venous thrombosis or peripheral neuritis. There was evidence, however, of what is commonly called "a feeble circulation." At birth they were both "blue children," and were very subject to chilblains, both the hands and feet getting readily livid with the cold. The elder patient was a girl, aged 16 years, and the younger a boy, aged 13 years; in both the swelling had existed for 13 years. In both the oedema was persistent so long as they led an active life, and it became more marked after a warm bath, but disappeared after a few days rest in bed. It was only troublesome from the weight and size of the legs, and did not give rise to any pain or other bad results. The disease in some respects resembles both Raynaud's disease and erythromelalgia, but differs from them in many important particulars. The pathogeny of it is obscure. The author suggests that possibly the persistent tendency to the oedema depends on some inherent defect or peculiarity of the smaller blood vessels which allows excessive transudation to occur on very slight provocation. At any rate it is not due to any of the ordinarily recognised causes of oedema. The treatment adopted consisted of rest in bed, with elevation of the end of the bed; small doses of digitalis and ergot were given with the intention of improving the vascular tone. But no drugs or the application of the constant current on the lines indicated by Sir Thomas Barlow in Raynaud's disease appeared to have any definite effect on the disease. Position of the limbs was the only thing which relieved the oedema to any appreciable extent.

The Meningeal Type of Enteric Fever.

The variety of enteric fever in which cerebral symptoms dominate the other phenomena of the disease is not of frequent occurrence, but is always difficult to diagnose. In the absence of a copious rose-spot eruption or of marked enlargement of the spleen, the other phenomena presented may be such as to be entirely explained on the theory of an ordinary meningitis. The following conclusions arrived at by Dabout, of Paris, from a careful investigation of 19 cases of this variety of enteric fever add something to our knowledge of the condition, and tabulate usefully for us the leading points:—

- (1) The symptoms specially indicative of meningeal involvement are cephalalgia and irritability, muscular and cutaneous hyperkinesia and hyperæsthesia, the presence of Kernig's sign, and occasionally epistaxis.
- (2) The symptoms referable to "irritation of the meninges" may occur—(a) as mere epiphenomena in the course of the disease; (b) as marked symptoms at its onset; or (c) as predominant and exclusive symptoms due to the presence and local action of Eberth's bacillus.

- (3) Kernig's sign is an especially valuable guide to the presence or absence of meningeal irritation.
- (4) Certain epidemics of enteric fever are characterised by a large number of cases of the meningeal type.
- (5) The prognosis of meningeal forms of enteric fever is always grave.

PATHOLOGY.

The Origin of Urine Albumin.

As the result of the injection of various proteid bodies into animals, substances are formed in the blood which are capable of precipitating *in vitro* solutions of the proteid materials originally used for inoculation. These substances are called "precipitins." For example, an animal previously treated with ordinary milk yields a serum which precipitates the milk casein. The serum of animals treated with albuminous urine precipitates the albumin present in fresh samples of urine. Professor Aschoff, of Göttingen (*Lancet*, September 6th, 1902), records some work done at the Jenner Institute complementary to that of Mertens on this subject (*Deutsche Medizin. Wochenschr.*, No. 11). Mertens' experiments appeared to furnish conclusive evidence that the albumin in nephritic urine is derived from the blood. He found that the serum of rabbits treated with human blood precipitated solutions of the albumins present in urine; but he did not test whether a precipitate could likewise be obtained by the injection of the proteid constituents of the kidney epithelium. Aschoff's experiments were, therefore, undertaken to see whether the injection of kidney substance resulted in the production of a precipitin for urine albumin. Some difficulties were at first experienced, but in the final series of experiments the following technique was adopted. Human kidney was first washed out with physiological salt solution and a portion of it was ground up in a mortar with salt solution. Chloroform was added to the emulsion of kidney substance thus obtained. The chloroform was removed by evaporation before each injection. Another portion was treated according to the method of Schütze for the preparation of muscle albumin, and the powder obtained was dissolved in a weak soda solution. This solution gave the usual proteid reactions. The animals received at intervals from six to seven injections of the emulsified kidney substance and of the solution of albumin respectively. They were then killed and their blood serum was treated in the following manner:—The serum in each case was added in various proportions to human urine containing albumin, and also to solutions of blood albumin, and the tubes were kept under observation at blood heat. The results were negative; in no instance did any precipitate occur, even after prolonged period of incubation. These experiments seem, so far, to confirm Mertens' results, and to support the view that the albumin present in the urine in nephritis is derived from the blood, and is identical from the specific kidney albumins.

Iodophilia.

Locke (*Boston Medical and Surgical Journal*, September, 1902) gives the results of further observations on the use of this test at the Massachusetts General Hospital. This paper is a continuation of one abstracted in the *A. M. Gazette*, August, 1902, p. 434. Septic conditions of all kinds, including septicæmia, abscesses and local sepsis, except in the earliest stages, appendicitis accompanied by abscess formation or peritonitis, general peritonitis, empyema, pneumonia, pyonephrosis, salpingitis with severe inflammation or abscess formation, tonsillitis, gonorrhœal arthritis and hernia, or acute intestinal obstruction where the bowel has become

gangrenous, have invariably given a positive iodophilia, and by its absence all these cases can be ruled out in diagnosis. In other words, no septic condition of any severity can be present without a positive reaction. Further, the disappearance of the glycogen granules in the leucocytes in from 24 to 48 hours following crisis with frank resolution in pneumonia, and the thorough drainage of pus in septic cases, is of considerable importance. Thus, in the former a positive reaction after several days, following crisis, would point strongly to delayed resolution, abscess or empyema, while in the latter it is certain evidence that the pus is not thoroughly drained. In these last-mentioned cases the author has repeatedly found the iodine reaction of assistance when other signs failed to give conclusive evidence. In cases presenting symptoms of appendicitis this reaction furnishes valuable indications as to the exact condition, for if absent the process is probably an early one, and confined to the appendix; if faint or only moderate, we may expect to find a small abscess or marked inflammation; if marked, a peritonitis or very severe inflammatory change in the region of the appendix is present. All the evidence points to the origin of the brown granules and the extra cellular masses in some degenerative process taking place in the leucocytes. Such a process can be explained by the condition of toxæmia existing in the cases referred to. If the leucocytosis represents "Nature's attempt to rid the blood and the system, by means of the leucocytes and their products, of the bacteria and toxic causes of disease," we should expect a marked iodine reaction in those cases where a toxæmia is so severe as to overcome the power of the system to produce a leucocytosis, and such has been invariably the case. This fact accounts for the discrepancy between the temperature and leucocytosis on the one hand, and the glycogen reaction on the other. The author considers the iodine test to be a far more constant and reliable indication of the severity of the infection than either the temperature or the white blood cell count.

The Morphology of Pleural Effusions.

Wolf (*Berlin Klin. Wochensh.*, February 10th, 1902), in a review of the composition of pleural effusions, states that conclusions may be drawn as to whether the effusion is tubercular or infectious. A tubercular effusion shows a large proportion of lymphocytes, and also polynuclear leucocytes at first; sometimes with bacilli which cannot be cultivated. Lymphocytes must be distinguished from degenerated polynuclear forms and pseudo-lymphocytes. Epithelial cells, while rarely seen, may have degenerated so that they resemble Ehrlich's large mononuclear cells. Widal, however, considers these mononuclear leucocytes, since they have frequently been found in pleural effusions. In acute infectious pleurisy, polynuclear and epithelial cells are in the majority.

The Fate of Diphtheria Bacilli in the Alimentary Canal.

Süsswein (*Wiener Klin. Wochensh.*, February 16th, 1902) states that diphtheria bacilli have been found in the lungs, liver, spleen, kidneys, bronchial glands, central nervous system, cerebro-spinal fluid, blood, bile and urine. Out of 146 diphtheria autopsies on diphtheria patients by Kolisko, at the St. Anna Kinderspital, in Vienna, only four cases showed gastric diphtheria, and only one of these has been found since the introduction of the diphtheria anti-toxin. Süsswein examined the gastric contents in eight cases of diphtheria immediately after death, in four of whom diphtheria bacilli were found, and in two of them they were

cultivated. They were not found in the jejunum, nor in the intestine. This shows the bactericidal action of the gastric juice.

Pathology of Pericardial Adhesions.

Wells (*American Journal of the Medical Sciences*, February, 1902) has found 128 cases of pericardial change in 1,048 autopsies. Of these cases 57 showed chronic changes, 8 were due to rheumatism, 6 to tuberculosis, and 43 were undetermined. Of the latter group 24 were total, and the remainder partial. He considers that the cause of pleural adhesions may also produce pericardial adhesions. In one case extensive tuberculosis of the lymph glands was associated with obliteration of the pericardium, and suggests that many cases of adherent pericardium are of tuberculous origin. In 18 of the 43 cases of undetermined causation, healed tuberculosis could be demonstrated, so that he is inclined to think that in at least 13 of these, tuberculosis was the cause of the pericardial adhesions. Some cases illustrating the association of pleural adhesions with pericardial are quoted; in four of these no etiological factor could be determined; in eight cases there was much reason to believe that the adhesions were due to rheumatism. Tuberculosis was carefully excluded by inoculations and histological examinations, and there was a distant history of rheumatism in all the cases. In these cases the mediastinal glands showed no change. In four cases the adhesions showed calcification; the cause of this condition is obscure, but it is probably not tuberculous; in all of these there was cirrhosis of the liver. The relation of cirrhosis of the liver to the chronic pericarditis is not understood; it is certain that a pseudo-cirrhosis occurs in cases of chronic pericarditis, and that in the calcareous form a true atrophic cirrhosis occurs. The author thinks that there is reason to believe that pericardial adhesions are not necessarily permanent, but when the process ceases to advance they undergo atrophy and are finally broken, remaining as tags upon the surface; they are less apt to be broken over the surface of the right auricle.

PEDIATRICS.

Acute Pyelitis in Infants.

Thomson (*Scottish Medical and Surgical Journal*, July, 1902) gives an account of the symptoms and treatment of this condition based on his personal observations on eight cases. These cases were all female children under the age of 20 months, and all except one had suffered from troublesome constipation. The symptoms have generally begun rather suddenly with a rapid rise of temperature suggesting pneumonia or influenza, and in four of the cases there were one or more distinct rigors. This is extremely suggestive, since rigors do not occur as a rule in young children except in malaria. A little vomiting sometimes occurred, and in two or three of the cases the respiration rate was accelerated as compared with that of the pulse, although no pulmonary disease could be made out. The temperature may reach 104° or higher, and its type is more or less remittent. The rapid effect on the temperature of the treatment is striking. Another marked feature of the disease is the extreme restlessness and distress which the patients display. The appetite is well maintained, and emaciation, though steady, may not be rapid. The symptoms pointing directly to the urinary tract are often slight and so indefinite as to be overlooked. The reaction of the urine before treatment was always extremely acid. Albumin was always present, but no more than could be accounted for by the pus cells. There were no tube casts found. Pus was always present in considerable amounts; a few epithelial cells of various forms were seen, but no blood. Bacteria were always visible

in large numbers in the freshly passed urine, and cultures of it give pure growths of the bacillus coli communis. No crystals were found at the time of the illness, but in two cases uric acid and oxalate crystals had been passed shortly before the symptoms of pyelitis began. The condition is then due to the implantation of the bacillus coli communis in the urinary tract, consequent on a reduced vitality of the tissues. Antecedent diseases such as scurvy and influenza may, along with some local irritation, play an important rôle in predisposing to the disease. The diagnosis mainly depends on the presence of pus and bacilli in the urine, along with high fever and extreme distress without any sign of organic disease in any other system to account for them. The presence of rigors (especially if the child be under two years of age, and if malaria can be excluded), and any local tenderness or pain on micturition, serves to draw attention to the urinary tract. The prognosis is good, as under proper treatment the cases improve with striking rapidity. The pus may remain, however, for several weeks. The main and only essential treatment consists in rendering the urine neutral by the administration of alkaline remedies as speedily as possible, and in keeping it so until the symptoms have disappeared. For this purpose the citrate of potash should be given in doses of 36 to 48 grains in the 24 hours. In less severe cases 24 grains per diem may be sufficient; but in any case the remedy must be persevered with, as premature cessation of its use leads to a return of the symptoms. Antiseptics are ineffective if administered alone, and there is no need for sedatives owing to the rapid relief afforded by the potash.

The Agglutinating Power of Fœtal Blood in Maternal Typhoid Fever.

Jehle (*Wien. Klin. Wochenschr.*, May, 1902) reports the examination of the blood of a seven months' fœtus stillborn in the fifth week of its mother's illness with typhoid fever. He found no organisms in it, and the agglutination of typhoid bacilli was much less prompt with it than with the mother's blood. In another case a five months' fœtus was born in the third week of the mother's typhoid. No bacilli were found in the fœtal blood, and no Widal reaction was obtained, though the maternal blood reacted at once. The author concludes that the blood serum of a fœtus not containing typhoid bacilli shows little or no agglutinating power. Roussacroux (*La Presse Médicale*, April, 1902) has investigated this same subject. He divides the cases in which the fœtus is born during the course of an attack of typhoid fever into those in which the fœtus is infected during pregnancy and contains typhoid bacilli; secondly, those in which the toxin is transmitted through the placenta, the fœtal blood giving the Widal reaction; and, lastly, those which the fœtus escapes altogether. In one case the mother gave birth to twins almost at term and died from typhoid fever. Labour occurred on the 11th day of the disease. The mother's blood gave a positive Widal reaction, but no reactions were obtained with the blood of either of the twins. In another case the mother gave birth to an eight months' child on the 13th day of the disease. The blood of the mother, the placenta, and the umbilical vein gave positive Widal reactions, but that of the fœtus was negative. This shows that no relation exists between the abortion and the intensity of the infection or intoxication of the fœtus, for the placenta early in the disease stops the passage of the toxins or antitoxins from the mother to the fœtus. Only when miscarriage occurs late in the disease will agglutinin probably have passed to the fœtus.

Non-Suppurative Meningitis.

Hutinel (*Rev. Mens. des Maladies de L'Enfance*, April, 1902) states that the symptoms formerly described as

pseudo-meningitic have been explained as due to a functional disorder of the cerebral cortex of toxic origin; or to a serous exudation of toxic origin which modifies the quantity and quality of the cerebro-spinal fluid; or to a serous exudation containing micro-organisms that are more or less attenuated in their virulence, and demonstrating by their presence the existence of a local infection. The latter condition has been spoken of as "bacterial serous meningitis." This is a true infection which does not go on to suppuration and is capable of being cured. The cerebro-spinal fluid always contains a greater proportion of albumin than normal. Leucocytes are present in greater numbers than normal, the majority of them being lymphocytes. The cryoscopic point and the hemolytic power of the fluid are modified. The pathogenic organisms are generally present in small numbers, and usually belong to those varieties capable of producing suppurative meningitis. The pneumococcus, the influenza bacillus, the bacillus typhosus, the staphylococcus and the streptococcus have been found, but it appears as if the toxins of these organisms were probably more often the causative factors in the disease. In the treatment of this condition the author advocates the use of warm baths at a temperature of 100° to 104° Fahr., continued for eight to ten minutes, and repeated frequently during the day. Lumbar puncture is also of much benefit in lessening the intensity of the symptoms, and at times it appears to cut short the duration of the disease. In all cases it relieves the patient, diminishes headache, and causes the contractures and the coma to disappear. It is necessary to repeat the operation, as its good effects do not last long. Bleeding by leeches behind the ears, or wet cups along the spine, cold applications to the head, laxatives, and potassium bromide and chloral are also useful in treatment.

Ozone in the Treatment of Whooping Cough.

Delherm (*Archives de Médecine des Enfants*, May, 1902) has recently recorded promising results in the treatment of the spasmodic stage of whooping cough by inhalations of ozone. He gives his experience of the treatment in 28 consecutive cases, in all of which he satisfied himself that, though the accompanying catarrhal condition was not influenced, the paroxysms of "whooping" were manifestly diminished both in number and severity. He recommends that the child should have three or four inhalations of ten minutes' duration in each 24 hours, and that the treatment should be continued during a fortnight.

Tracheotomy and Intubation in Diphtheria.

Siegert (*Archives F. Kinderheilkunde*, 1902) has collected statistics upon tracheotomy and intubation in diphtheria since the antitoxin treatment was begun, from 93 European hospitals. Out of 22,615 cases of laryngeal diphtheria upon which operation was performed, the mortality was 34.28% as compared with 60.38% before the antitoxin treatment. Sixty-four hospitals only do tracheotomy; out of 11,104 patients, 3,808 died, 34.29%. In Halle the mortality was only 15%. Ten hospitals do intubation primarily; out of 3830 patients, 1361 died, 35.54%. This failed to give relief in 1156, upon whom tracheotomy was done secondarily. After giving detailed statistics, Siegert concludes that in hospitals tracheotomy and intubation give approximately the same results; to reach this low mortality rate intubation will need primary or secondary tracheotomy; replacing tracheotomy by intubation does not change the mortality; intubation makes tracheotomy superfluous in two-thirds of all cases; finally, only the combination of both procedures will give the best result. The advantages and disadvantages of intubation and tracheotomy follow.

CORRESPONDENCE.**London.**

(FROM OUR OWN CORRESPONDENT.)

The Egyptian School of Medicine—Alcohol in the Tropics—Medical Legislation in Canada—The American Tuberculosis Congress—The Hippocratic Oath—Medical School for the United States Navy—Bovine and Human Tuberculosis—Journal for the Medical Services of the Army—Royal College of Surgeons of England—The King's Day of Fate.

Is the "Records of the Egyptian Government School of Medicine," recently published by the director, Dr. H. P. Keatinge, an interesting history of the school is given by Dr. Sandwith, senior physician to the Kasr-el-Ainy Hospital. Till the beginning of the 19th century Kasr-el-Ainy was a palace, but during the French occupation it was turned into a hospital. In 1837 it became the seat of a medical school under a Frenchman, Clot Bey. One of the greatest services rendered by this medical pioneer was the introduction of vaccination. Clot was succeeded by Griesinger, and Bilharz (the discoverer of the distoma hæmatobium). The first Englishman to enter the medical service of the Egyptian Government was Dr. Sandwith. When he first became acquainted with the Kasr-el-Ainy Hospital, in 1883, it was in a filthy state, and gave accommodation to upwards of 400 patients; six native professors were in daily attendance, but there was no nursing except that afforded by worn-out old soldiers, no records of cases were kept, all attempts at diagnosis and treatment were of the crudest and most haphazard type imaginable, and no post-mortem examinations were made unless required by law. Dr. Sandwith set himself to work a much needed reformation, and as a first step appointed Mr. Milton as resident medical director. Want of money at first proved a serious obstacle to the advance of the medical school; but by degrees one after another competent European teacher was appointed, bacteriological, physiological, and histological laboratories were built, and eventually the school became established on a sound scientific basis. The best proof of the good work which has already been done is to be found in this volume of "Records," which give details of an amount of scientific investigation carefully carried out, of which Dr. Sandwith and his school have good reason to be proud.

It has been decided to hold a congress of medicine in the Kasr-el-Ainy Hospital during next December, and the scheme has been warmly approved by the Khedive and his Ministers. Already 300 medical practitioners resident in Egypt have joined the congress, and 250 more from various parts of Europe and America have announced their intention of taking part in the proceedings. The work of the congress will be divided among four sections—Medicine, with Dr. Sandwith as one of the vice-presidents; surgery, with Mr. Milton as president and Mr. F. C. Madden as vice-president; ophthalmology, with Dr. E. C. Fischer as vice-president; and tropical diseases, presided over by Dr. M. A. Ruffer. An English committee, under the presidency of Sir Frederick Treves, has been formed to forward the interests of the congress.

The medical adviser to the Government has formulated certain suggestions to officers selected for service in South Nigeria. The following are among the more important:—

Brandy ought never to be touched unless ordered medicinally by a physician.

If a man has been a total abstainer before coming to West Africa let him remain so.

If a man has been a temperate drinker before coming to West Africa let him remain such, and only be more strict than ever in his temperance.

If a man has been a free liver, it is *absolutely essential* that he should change his habits without delay, or the climate of West Africa will terribly avenge itself on him for his bravado and folly.

Of spirits, brandy, gin, rum and absinthe should be regarded as poisonous. Old Scotch or Irish whisky in great moderation, well diluted, and never taken on an empty stomach, is perhaps the least deleterious of spirituous liquors and the slowest poison.

Coffee, tea and cocoa are excellent restoratives for the fatigued body or wearied brain, and are far better in the performance of hard work than alcohol.

Dr. Roddick, M.P., who was president of the British Medical Association when it met in Montreal, has succeeded in passing through the Canadian Legislature a bill to establish a General Medical Council for Canada. There are at present eight licensing bodies throughout the various provinces of Canada, but each license applies only to the province in which it is obtained, and the matriculation regulations make it practically impossible for a graduate to obtain another license in a second province. This has proved a source of grave inconvenience, and often of great hardship. Under the new Act, examinations will be conducted by a central council which will grant diplomas valid for practice throughout the whole country. It is intended that the course of study shall be brought into conformity with that prescribed in Great Britain; the curriculum will, therefore, be one of five years. The council will number probably 36 members, three of whom will be elected by the homœopathic practitioners throughout the Dominion. This last concession will not commend itself to everyone, but it was rendered inevitable by the fact that certain provinces already possess rights which could not be overridden; the proportion of homœopaths fortunately will be so small that their influence will scarcely be felt should questions arise which bring them into disagreement with their allopathic colleagues. The council will have power to make new regulations, so long as they are not contrary to the spirit of the Act, and it shall assess the fees payable for registration, etc. There are many other details of this new measure which are distinct improvements on the provisions of our Medical Acts at home, and Dr. Roddick may be congratulated on piloting through Parliament a measure which is, on the whole, a good one, and which in its general tendencies makes for the realisation of the Imperial idea.

The third annual meeting of the American Congress of Tuberculosis and the Medico-Legal Society was held in New York on the 2nd, 3rd and 4th of June. A large number of delegates were present from the United States. Representatives from Canada, Mexico, Central and South America were also present. The presidential address was delivered by Dr. Henry D. Holton, of Vermont. Various subjects were discussed, the more important being "Preventive Legislation," "The Bacteriology and Pathology of Tuberculosis," "The Importance of Individual Predisposition in the Development of Tuberculosis," and "The Veterinary Aspects of Tuberculosis."

Each of these subjects elicited long and interesting discussions, which were taken part in by most of the leading medical authorities of America and Canada. The practical outcome of such congresses is the wider dissemination of the most recent knowledge concerning this great human scourge, and this is surely a step in

the direction of a more accurate conception of the disease in its relationship both to men and animals, and of more successful methods in dealing with its prevention and cure.

Several interesting communications have recently been made to the *British Medical Journal* concerning a plane tree in the Island of Cos, which tradition points to as the one under whose umbrageous boughs Hippocrates taught the art of healing more than 2300 years ago, and which is revered and cared for accordingly. The *plantanus orientalis* was valued by the Greeks for its ornamental character; it attains an immense size and lives to a great age. It is one of the three trees which are described in Ezekiel as having flourished in the Garden of Eden. Little is known of the details of the life of Hippocrates, but he was born in the Island of Cos in the year 360 B.C., and is believed to have been nineteenth in direct descent from Asklepios.

He studied the art of healing first in the famous Asklepeion of his native island and afterwards at Onidos. He practised and taught his art in Athens, Thrace, Thessaly, Delos and Cos, and died at an advanced age at Larissa, in Thessaly. Many writings have been attributed to him, but none seem more authentic than the famous oath which bears his name, and which remains to the present day the most perfect compendium of the rules that should guide every physician in the practice of his profession. It is couched in the following terms:—

"I swear by Apollo the healer, by Asklepios, by Hygiea and Panakeia, by all the gods and all the goddesses, taking them to witness that I will keep, according to my strength and capacity, the following oath and obligation. I will put my master who taught me medicine on the same level as the father who gave me life. I will share what I have with him, and in case of need I will provide for his necessities. I will hold his children for my brothers, and if they wish to learn medicine I will teach them without taking fee or pledge from them. I will impart the precepts, oral instruction, and other teaching to my sons, to those of my master and to the disciples bound to me by covenant and oath according to the medical law, but to none else. I will regulate the way of living for the sick to their advantage according to my power and judgment, and I will refrain myself from all evil and all injustice. I will not give poison to anyone if I am asked for it, nor will I make such a suggestion. In like manner I will not give to any woman an abortifacient pessary. I will spend my life and practice my art in innocence and purity. I will not perform the operation of cutting for stone, but will leave that for persons who make it their business. Whatever house I enter I will go into it in order to be of use to sufferers, avoiding every wilful and corrupting misdeed, and especially the seduction of women and of boys, free or slaves. Whatever I may see or hear in the course of my practice, or even outside the line of my professional duty in the lives of men, that ought not to be noised abroad, I will not speak of, considering that such things should be kept secret. If I keep this oath without breaking it, may it be given unto me happily to enjoy life and the exercise of my art, ever held in honour among men. If I violate it and become a perjurer may the opposite fate be my lot."

A scheme for establishing a school at Washington for naval officers, on the lines of their Army Medical School, is at present under the consideration of the American authorities. The present course of instruction which is provided at the Naval Hospital in Brooklyn is insufficient, and the plan of tuition in the new school will be more elaborate and on a much broader basis. Besides giving instruction in the proper performance of their duties to recently appointed naval surgeons, the school

is also intended to be utilised as a polyclinic where officers of longer service who are home on study or other leave can bring themselves up to date in the newest developments of medical and surgical science and prepare themselves for examinations.

Professor Koch's startling announcement at the Tuberculosis Congress, held in London last year, that it was impossible for human beings to be infected with tuberculosis by cattle suffering from the disease, met with much opposition. One of the strongest disbelievers in Koch's new theory was Dr. Garnault, of Paris, and, full of the courage of his opinions, he went to Berlin and offered to submit himself to inoculation with the virus of bovine tuberculosis in order to prove experimentally through his own tissues whether he or Koch was right. His offer was refused by the German authorities, and a few days ago, still intent upon solving the problem, he performed the operation on himself at the Villette slaughter-house. Doctors Marcel, Baudoin, Barlerin, and Demeurisseé were witnesses of the experiment, but took no part in the operation. Dr. Garnault took every precaution to secure a thorough inoculation. He had previously blistered his left forearm over a space of about 12 square millimetres below the elbow, and having removed the cuticle he applied to the abraded surface thus produced a poultice of the pounded glands of a cow which had been seized by the authorities because it was suffering from advanced tuberculosis. This application was kept closely in contact with the blistered surface by bandages for two hours. Part of the pounded gland mass was reserved for the purpose of inoculating guinea pigs.

Should this experiment not succeed, Dr. Garnault has undertaken to place himself unreservedly in the hands of Dr. Baumgarten, of Tubingen, and Dr. Theobald Smith, of Boston, for such further experimental researches as they may think proper to make on him with cultures of bovine tubercle.

In reply to an interviewer, Dr. Garnault said: "The inoculation which I operated on myself was intradermic—that is to say, I did all I could to avoid the veins in order to diminish as far as possible the chances of general infection. I sought to obtain the maximum of demonstrative effects with the minimum of risks. If the result is positive, Professor Koch's error will be demonstrated, and I shall employ all the resources of the medical and surgical sciences to try to cure myself. If the result is negative, I shall operate on myself an intravenous inoculation of tuberculous matter in the finger."

This experiment will be watched with much concern by all who are interested in the question of tuberculosis and its prevention; but it is doubtful whether such an *experimentum crucis* was desirable, or, at any rate, whether it might not have been postponed till ordinary laboratory methods had been declared incapable of solving the doubt. The sensational element in all cases where men offer themselves in this public way as martyrs to science is apt to destroy much of the scientific value of such researches, while so many obvious fallacies may obtrude themselves upon the results obtained that no single experiment of this kind could be depended upon as affording anything more than *prima facie* evidence one way or other.

Sir William Taylor, Director-General of the Army Medical Department, has issued a circular regarding a proposal to establish an army medical journal devoted to matters of professional and scientific interest similar to those which are issued by the medical services of Continental powers. It is believed that such a journal would be welcomed, as it would enable medical officers to keep in touch, not only with the work being done in the

British army at home and abroad, but also with the advances and changes that are continually taking place in the armies of other nations. It would further serve to focus a large amount and variety of useful knowledge, which is now practically lost from being dispersed in many different directions.

It is intended that the new journal shall contain original articles of a medical, surgical and scientific nature bearing upon army hygiene, together with reprints and translations from military, medical and other journals. The proposal affords gratifying evidence of the enterprise of the new Director-General, and, should it receive from the medical department sufficient support to warrant its being carried into effect, the journal will no doubt find an ample field of usefulness, and prove itself an important help to the development of the new scheme of reform which has recently been inaugurated.

At a quarterly meeting of the Council of the Royal College of Surgeons of England, held on the 10th July, the President reported the re-election of Mr. Howard Marsh, and the election of Mr. John Hammond Morgan, Mr. Henry Hugh Clutton, and Mr. Charles William Mansell Moullin as members of Council. These gentlemen having been introduced, took the oath prescribed by the charter of 1800, and were duly admitted.

Sir Henry Greenway Howse was unanimously re-elected president of the college, and Mr. John Tweedy and Mr. A. W. Mayo Robson were elected vice-presidents.

In a recent issue of the *Lancet* it is pointed out that, very curiously, most of the important events in the life of his Majesty King Edward VII have happened on a Tuesday. On Tuesday, November 9th, 1841, his Majesty was born; on Tuesday, January 25th, 1842, he was christened; on Tuesday, March 10th, 1863, he was married; on Tuesday, December 8th, 1863, he was appointed a member of the Privy Council; on Tuesday, November 21st, 1871, it was definitely ascertained that he had contracted enteric fever; on Tuesday, February 27th, 1872, he attended the public thanksgiving service for his recovery; on Tuesday, January 22nd, 1901, he succeeded to the throne; on Tuesday, January 29th, 1901, the royal standard was hoisted at Marlborough House for the first time; on Tuesday, June 24th, 1902, he underwent an operation for perityphlitis; and on Tuesday, July 15th, 1902, he had sufficiently recovered to be removed on board the "Victoria and Albert" in the Solent.

Tasmania.

(FROM OUR OWN CORRESPONDENT.)

Prosecution of a Quack—Launceston Hospital—Medical Advertising—Outbreak of Anthrax—Queenstown Hospital Trouble.

A QUACK named "Major Jarasco," who has been practising for some time in Hobart, has appeared before the Police Court charged with unlawfully practising as a physician. Owing to the unsatisfactory nature of the evidence, however, the case was dismissed. "Jarasco" has subsequently been arrested by the police for obtaining money under false pretences.

Mr. J. Ramsay, M.B., the surgeon-superintendent of the Launceston Hospital, has been granted 18 months leave of absence, and has left for a trip to Europe. Before his departure he was the recipient of presentations from the committee and nursing staff of the institution.

Mr. Hayward, M.B., the present house surgeon, has been chosen to fill the temporary vacancy, while Mr. Barnard, M.B., has been elected house surgeon.

A somewhat novel, though happily rare, form of medical advertising has been resorted to by a medical practitioner of Launceston. Cards have been issued as follows, and are displayed prominently in certain shops:—

Launceston Telephone Exchange.

People we may want in a hurry:

Launceston Fresh Food and Produce Co.—Fresh poultry, pork, and small goods daily; delivery anywhere. No. 288.

Police Station. No. 43.

Doctor.—Dr. Webster. No. 236.

Dr. Webster is an M.R.C.S. 1881 and M.D. Durham 1899.

Perhaps the authorities of these licensing boards will see fit to put a stop to such unprofessional notices.

An outbreak of anthrax is reported in the Sassafra and Sprent districts, and the Government veterinary surgeon (Dr. Willmot) has superintended the inoculation of the cattle of the infected areas. This outbreak recalls the fact that last year beasts in the Lilydale district died of a suspicious disease believed to be anthrax, and that a case of malignant pustule in the human subject was reported. The patient, a farmer, was the inmate of a private hospital for some weeks, and was seen by several medical men. He stated at the time that he had been so frequently handling skins and beasts that he could not attribute his infection to any particular time or case; yet in the report of the Central Board of Health for 1901, which is just to hand, it is stated that "from bacteriological examinations of the blood, liver and spleen of the bullock which was supposed to have infected the patient only negative results were obtained." Might one ask—Who chose the unfortunate bullock (pardon the "bull") which was to be the "scapegoat" of the Central Board of Health? Really, the whole matter would be ludicrous were it not that it appears in State documents issued by the supreme health authorities of Tasmania. As it is, the publication of such arrant nonsense is only one of many reasons for a thorough change in the Health Department of the State.

A Royal Commission, consisting of Messrs. Bernard Shaw, L. S. Holmes, L.R.C.S., and I. Bennison was engaged last week investigating the Queenstown Hospital trouble, which arose in connection with the dismissal by the Hospital Committee of the surgeon of that institution. The Commission has now completed its task, and a draft of its decision will be presented to the Governor-in-Council. It is reported that the members of the Commission are in agreement as to all the allegations that have been made, and have framed a definite pronouncement upon the counter charges.

[Later information has been received to the effect that the Royal Commission reporting on the Queenstown Hospital inquiry records its opinion that the Hospital Union acted in perfect good faith and exhibited commendable moral courage in protecting the interests of the institution by dealing with the action of the doctor as subversive of discipline and calculated to destroy the usefulness and efficiency of the Hospital, rendering his reappointment impossible.]

FEEES FOR EXAMINING INSURANCE PROPONENTS.

(To the Editor of the *Australasian Medical Gazette*.)

SIR,—As the remarks attributed to me in your last issue, on the above subject, bear not the slightest resemblance to my real utterances at a recent meeting of the

N.S.W. branch of the B.M.A., I should like a few lines to explain myself. In the society for which I examine there are two forms—one very lengthy and the other extremely brief. The latter is for proponents assuring only for small sums. The fees paid to the medical examiner are one guinea for cases insuring for larger amounts and half a guinea for those insuring for small, and in whose case only the shorter form requires to be filled in. Now, I said that these smaller cases paid the medical referee, comparatively, much better than the larger ones, because they occupied considerably less than half the time spent in filling in the longer forms and making the necessary additional examinations (of urine, etc.) in connection with the more important cases. It seems to me that they are as different from the point of view of adequate remuneration as, say, amputation of a finger and disarticulation at the hip-joint.

Yours &c.,

JOHN MACPHERSON,

Sydney,

October, 24th, 1902.

TONIC CONTRACTION OF THE UTERUS.

(To the Editor of the Australasian Medical Gazette).

SIR,—The following note may be of interest in connection with the articles over the names of Drs. Todd and Sweetapple in the *Gazette* of September 20th, 1902:—

On June 10th, 1902, Dr. J. C. Kennedy, of Newtown, sent for me to assist him in delivering Mrs. J., a primipara, of 37 years of age. He had been called in only in time to find the membranes ruptured and the arm presenting (hand in vagina). The uterus was then in a state of contraction, and attempts to turn or repose, under chloroform, failed.

When I arrived at about 3 a.m. the hand and arm were lying in the vagina, and the head could be felt to the left of the uterine cavity, bent back on the shoulder of the other side. Dr. Kennedy said he had been quite unable to seize a leg on account of the tonic contraction of the uterus, which was quite hard and firm. Dr. Kennedy administered chloroform again, while I endeavoured to get hold of a foot and at the same time replace the prolapsed arm. I merely succeeded in getting my hand up as far as the wrist, and here it was grasped by the uterus as tightly as in a strong man's fist, and without any slackening in the contraction for as long as I cared to keep it there. On one occasion I continued trying to force the hand up steadily for 20 minutes at least. Dr. Kennedy administered the chloroform freely, but no relaxation was produced. My hand at length became benumbed, and I was afraid I should fail to turn even if I did get far enough up. We now decided to push the anæsthetic, and Dr. Kennedy brought the patient profoundly under its influence, while I continued a steady upward pressure with my hand as a cone in the lower segment of the uterus, which latter evinced not the slightest inclination to relax. It was now decided that as the arm would not stay in utero and was seriously in the way we should amputate it at the shoulder. This we did and then pulled down the other and treated it in like manner. There was still no sign of relaxation of the uterus. My hand was quite powerless to pass up between the child and the uterine wall. Just at this time Dr. Kennedy called my attention to the condition of the patient with reference to the anæsthesia. The breathing was very shallow, aspect deadly pale, pupils widely dilated, and the whole appearance alarming. My hand was still endeavouring to force its way up the side of the womb, and the contraction was as firm and uninterrupted as

ever. Dr. Kennedy then snapped two capsules containing each one five minims of amyl nitrite, and caused the patient to inhale as much of it as possible. While one could count ten, matters remained in *statu quo*, and then of a sudden the contracted uterus relaxed fully and my hand slipped up easily, and I was able to seize a foot, turn and deliver, using the forceps for the after-coming head. The patient was much exhausted after recovering from the chloroform, but under Dr. Kennedy's care made an excellent recovery, though we afterwards had to do a complete perineorrhaphy. I have a patient who can never get an efficient "pain" till I give her chloroform. I think if either Dr. Kennedy or I meet with another case of tonic uterine contraction we will use amyl nitrite first instead of last. I am not aware that this drug is recommended for the purpose, but its use appears reasonable, and in the above case I have not the slightest doubt that it alone was responsible for the uterine relaxation.

I am, yours, etc.,

C. H. SOUTER, M.B., C.M. Aberd.

Balaklava, South Australia.

REPORTS OF SOCIETIES.

Sydney and Suburban Provident Medical Association.

THE annual meeting of this Association was held at 121 Bathurst-street, Sydney, on 28th October, 1902; Dr. Worrall in the chair.

The hon. secretary's report for the year 1901-1902 showed that 1058 new members had been enrolled during the 12 months. The active medical staff now numbered 88, and the consulting staff 38. The usual dividend at the rate of 17s per member per annum had been paid. A proposition had been made to extend the benefits conferred by the Association to the granting of sick pay and funeral expenses through an insurance company, but on consideration it was decided not to adopt the suggestion.

A case had arisen owing to one of the active medical staff declining to attend a member on his list, thus necessitating the payment by the Association of a fee charged, owing to another medical practitioner being called in, it being deemed only right that a member should be refunded the expense he had been unwarrantably put to. To prevent the recurrence of such a case, a by-law had been framed and passed, a copy of which will be forwarded to every member of the active staff.

The increase of work in connection with the office had necessitated the employment of a clerk to help the assistant secretary in this and other duties, this increase in expenses being shared by the British Medical Association.

The hon. treasurer's statement showed that the net receipts for the year amounted to £3671 1s 4½d, the total paid in dividends to doctors and chemists being £3514 16s 9d, which, after deducting printing and stationery account, left a balance of £30 4s 10d to be carried to the reserve fund as a result of the year's operations. The report and statement were unanimously adopted.

Stress was laid by several of those present at the meeting on complaints having been received of want of attention on the part of the active staff to members. It was pointed out that the number of lapses occurring on the doctors' lists were due in many instances to this cause.

The election of office-bearers resulted in Dr. Worrall being re-elected chairman, Drs. O'Hara and Binney as hon. secretary and hon. treasurer respectively, and the following gentlemen were appointed to fill the vacancies on the general committee:—Drs. Macpherson, D. Luker, H. S. Stacy and Clatworthy, Dr. D. MacMaster as the representative for the North Sydney Medical Association, Dr. M. O'Gorman Hughes representing the Eastern Suburbs Medical Association, Dr. Wade for the Western Suburbs Medical Association, and Dr. W. H. Crago for the New South Wales Branch of the British Medical Association.

UNIVERSITY INTELLIGENCE.

SYDNEY.—At the last meeting of the Senate of the University, a letter was received from Dr. Fiaschi offering to deliver a voluntary course of lectures on the "History of Medicine" to medical students. The offer was accepted. The following examiners were appointed to act in the conduct of the forthcoming annual examinations in medicine:—Anatomy, Dr. A. E. Mills; physiology, Professor E. C. Stirling; pathology, Dr. Sydney Jamieson; materia medica, Dr. A. Watson Munro; medicine, Dr. McDonald Gill; surgery, Dr. Hankins; midwifery, Dr. McCulloch; gynaecology, Dr. Fourness Barrington; clinical medicine, Dr. P. Sydney Jones; clinical surgery, Dr. T. Fiaschi; psychological medicine, Dr. Eric Sinclair; ophthalmic medicine and surgery, Dr. Odillo Maher; medical jurisprudence and public health, Dr. Armstrong. A report was received from the Faculty of Medicine, to which had been referred the revision of the medical curriculum. The faculty recommended a curriculum which had been amended in such a way as to allow more time for hospital and clinical work during the latter part of the course than exists under present arrangements. In the amended curriculum, which was adopted by the Senate, the work of the present first year is somewhat curtailed, while human anatomy and practical histology (microscopical anatomy) are introduced at the end of the first year, instead of in the second year as at present. The other changes, with two exceptions, consist in moving the subjects generally to an earlier place in the curriculum, so as to allow more time in the fifth year for hospital and clinical work. *Materia medica* as a single separate course is omitted, while special courses upon pharmacology or the physiological action of drugs, special therapeutics and posology and prescription writing have been established. In the fifth year, students will be required to select two subjects from the following:—Diseases of children, diseases of the skin, diseases of the ear, nose, and throat; special bacteriology and special therapeutics. In lieu of the present five annual examinations, there will be in future only three, marking the completion of the preliminary scientific, the medical scientific, and the applied medical work respectively. There will also be two term examinations, one in organic chemistry in the second year, and one in general pathology in the third year. The report was adopted, including the amended curriculum recommended by the faculty.

MELBOURNE.—A heavy retrenchment scheme has been adopted by the University Council. Reductions totalling £1249 have been made in the salaries of professors and lecturers. On the other hand, professors, lecturers, and others have promised subscriptions to the amount of £873 for 1903 scholarships have been reduced 20 per cent., and fees increased, so as to make a difference of £1809. In various ways the total improvement comes to £4616.

INSANITY IN AUSTRALIA.

South Australia.

From the annual report of Dr. W. T. Cleland on "The Hospitals for the Insane in South Australia," we learn that on December 31st, 1901, there were 988 patients in the lunatic asylums, showing an increase of 10 patients. The average number resident during 1901 was 983, showing a decrease of seven patients as compared with 1900. When the numbers are considered as individuals, and not cases, and are compared with those of 1900, it is seen that there were 12 individuals less under care during 1901. The official insane population is, therefore, practically at a standstill, and has been so for the past two or three years.

The ratio of lunatics, etc., to the population also shows that the ratio is stationary, keeping at 2·67 per thousand of the population. The same relative proportion between the sexes also continues, there being about 8 more males than females. This relation of the sexes stands in contrast to the British numbers, which show a preponderance of 5 for the women.

Admissions.—The total admissions for 1901 were 214. Of these 164 were fresh cases who had never, as far as known, had an attack of insanity before; 95 were males and 69 were females. This is almost the same as for 1900.

As regards the age of the individual admissions, 30 patients were over 60 years of age—being 18 males and 12 females. Below the age of 15 years only two. Insanity being a disease of adult life when it should be in its prime, it is found that the greatest stress is from 20 to 50 years of age.

Amongst predisposing and exciting causes of insanity, adverse circumstances and mental anxiety to the extent of 86, previous attacks and hereditary influence to the extent of 65, and as a resultant of other bodily diseases to the extent of 50, may be mentioned as exerting the greatest influence.

The form of insanity was not of such a depressant type as in 1900, there being 84, as compared to 63 in 1900, whose mental condition was more or less excited and delusional; the depressed forms were about the same in number, whilst the senile cases of both conditions showed a marked increase.

The ratio per 10,000 of admissions to population is lower than it has been during the two preceding years. For 1899 it was 6·98, for 1900 it was 6·04, and for 1901 it was 5·8; showing a progressive decrease. This is due to a greater proportionate decrease on the male side, whilst on the female side a marked increased ratio is noted.

Discharges.—The percentage of recoveries on admission was low, which is due to a number of the female cases being old and helpless from the beginning. The percentage of recoveries on the male side was nearly up to the average, namely, 55·1, as compared to 55·8; whilst on the female side it was only 46, as compared to 59·6. Of the patients admitted during 1901, 31·6 per cent. were discharged as recovered, 33·6 per cent. being males and 29·3 being females. If more time is given to the patients in which to recover (say, an additional 12 months), the percentages become largely increased.

Of the 55 admissions whose mental condition partook of the nature of excitement or mania, 87·3 per cent. were discharged as recovered or improved; whilst of the 36 admissions suffering from mental depression or melancholia, only 63·9 per cent. were able to be discharged.

Deaths.—During 1901, 82 patients died, giving a percentage of deaths on the average number resident of 8·3;

this is slightly below the average for the past 40 years, which is 8·7 per cent. Rather more than half of these deaths occurred amongst the admissions of the past three years, namely, 30·5 per cent. of those of 1901, 15·8 per cent. of those of 1900, and 7·3 per cent. of those of 1899.

Expenditure.—The total expenditure on the lunatic asylums shows an increase of £3048 over that for the year 1900. Of this £2049 is due to the increased price of provisions, especially meat; the sum of £725 is due to increases to the pay of attendants, and £200 to increased consumption of water for irrigation and higher price for fuel. The fees for maintenance received during 1901 were £3593; those for 1900 were £3697.

Victoria.

The following is an abstract of the report for the year 1901 on the Hospitals for the Insane in Victoria by Dr. J. V. McCreery, the Inspector:—

Admissions.—The admissions numbered 757 persons, against 687 for the preceding year, but fewer than for the year 1899, when they reached 785. The daily average number of patients resident in the asylums was 4292, an excess of 31 over the previous year.

Accepting the general population of Victoria on December 31st, 1901, as 1,208,705, it will be found that the ratio of the insane admitted during the year to the general population was 1 in 1596; for the previous year the ratio was 1 in 1741. In 1901 the insane under official cognisance represented 1 in every 268 of the general population; for the year 1900 the ratio was 1 in 272.

Discharges—Recovered.—Although the aggregate number of patients discharged as recovered was greater by 18 than for the previous year, yet a diminished percentage rate, calculated on the admissions, is shown, being 38·88, against 40·09 for the preceding year. At the same time, the "relieved" rate has fallen from 8·56 in 1900 to 3·51 in 1901. Combining the "recovery" and the "relieved" rates, as in former years, the total discharge rate is 42·39. There was a considerable increase in the number of patients allowed to be absent from the asylums on probation, the figures having risen from 97 to 167 during the year, and there were two more patients boarded out. These changes left only 40 additional patients resident in the asylums on the 31st December, and this condition, speaking generally, may be regarded as satisfactory.

Mortality.—The total number of deaths was 330, or 23 fewer than for the previous year. The percentage on the daily average numbers resident was 7·68, which is about the average rate for the past 20 years.

Restraint.—Efforts have been made to reduce the amount of restraint used in the treatment of the patients. Some of the asylums, however, still continue to compare unfavourably with similar institutions in other countries.

Early Treatment of Mental Diseases.—The receiving house, when built, will render it possible to deal with some cases earlier than at present, but at best this is only a very partial remedy. Special classes for nervous diseases should be established in connection with some of our leading hospitals, where persons in the early stages of mental disease could be treated amongst other sufferers from nervous affections without any brand of insanity afterwards resting on them or their families.

Works and Buildings.—A ward for the accommodation of 100 female epileptic patients was opened at the Ballarat Asylum, and the same institution was provided with a new kitchen, laundry, general bathroom, and an improved water supply. The new laundry was opened at Sunbury. The Yarra Bend Asylum has been lighted throughout with gas. A number of minor works were carried out at the various asylums, but many of the

buildings are old and require outside painting, and considerable alterations and repairs.

Staff.—A well-deserved increase of salary has been granted to the superintendents, the medical staff and many other officers; but it is doubtful if present inducements are sufficient to attract and retain leading officers with high training and ability.

Cost of Maintenance.—The total expenditure of this department for the year 1901 amounted to £127,763 11s 3d. After a deduction of the management and other expenses not directly connected with the maintenance of patients, the expenditure was £122,611 17s 5d, or an average weekly cost per patient of 10s 11½d. The actual expenditure of the State is, however, reduced by collections by the Master-in-Lunacy from the friends or estates of patients for maintenance, and amounts received from the asylums as the proceeds of sales of surplus stock, fines, etc. Allowing for these sums, the net cost of each patient is reduced to 9s 4½d per week. The net weekly cost for the year 1900 was 8s 6d per patient. The year 1901, however, was an exceptionally expensive one, and this condition is due chiefly to the considerable concessions made to the staff on their reclassification and to greatly increased prices of provisions and fuel.

General Remarks.—It is generally admitted that the Victorian lunatic asylums are in many ways below the modern standard of such institutions. The causes that have occasioned the present unsatisfactory condition of affairs are—Want of proper authority, division of what authority there is, and the absence of reasonable individual responsibility. Considerable saving of time, and, possibly of money, might be expected if all the work for the asylums now done by the Under-Secretary's office, the Master-in-Lunacy, the Tender Board, and the Public Works Department was placed under one controlling body. It may also be noted that the pathological interests of the asylums are placed in the hands of the Crown Law Department, with the natural result that pathology remains undeveloped in our institutions. The state of matters in connection with administration lends itself to the absence of personal responsibility on the part of asylum officers. The female epileptics have been placed in specially constructed wards at Ballarat, and are receiving the necessary care that it was found impossible to bestow on them in the overcrowded wards of the general asylums. The reports of the official visitors indicate that the idiot children are receiving proper care and training in their special institution. It is expected that in the course of a year or two a receiving house, pay patients' cottages, ward^s for patients suffering from tubercle, and wards for male epileptics will add much to the usefulness of the Department.

New South Wales.

DR. ERIC SINCLAIR, Inspector-General of the Insane in New South Wales, has forwarded to us a copy of his report for the year 1901. The following is an abstract:—

On December 31st, 1901, the number of insane persons was 4488, the increase during the year being 92. The average annual increase for the past 20 years was 113; the increase is, therefore, considerably below the average. The proportion of insane to the general population is one insane patient to 307 persons in the State.

Admissions.—The number of admissions was 848. Of these, 696 were admitted for the first time, and 152 had been in the same hospital on some previous occasion. The number of admissions is slightly less than in 1900, but is still higher than any previous year.

Discharges.—The number of patients discharged recovered was 398, equal to a rate of 46·93 per cent. on the admissions and readmissions. The recovery rate is well over the average for the past ten years,

but this is probably due in part to the discharge on trial of a larger proportion of patients than in previous years. Excluding the figures from the Hospital for Imbeciles at Newcastle, the recovery rate is increased by 3·45 per cent. The number of those discharged improved was 54, showing a proportion to the admissions and readmissions of 6·36 per cent. The number of patients discharged on probation, or granted leave of absence, was 322, making with those remaining from the previous year 472. Of these, 184 were discharged recovered, and 125 were returned to hospital, leaving still on leave at the close of the year 160, as compared with 152 left at the close of the previous year.

Deaths.—The deaths numbered 292, a percentage of 6·83 on the average number resident—slightly above the average for the past ten years, which is 6·42.

Accommodation.—The need for further hospital accommodation has become more pressing. A new Hospital for the Insane at Orange to accommodate patients from the western district is urgently required. Fortunately the increase in the number of insane in hospitals during 1901 was smaller than the average, and this alone has prevented the creation of a serious position from overcrowding. Besides a new hospital, additions to those already erected are in some cases necessary. At Gladesville admission wards for both sexes, in the form of an acute hospital, are urgently required. The wards there are old, and not well suited for the treatment of acute cases on modern lines. The rooms are small and insufficient in air-space, and the wards are enclosed, so that patients are confined more than is desirable or conducive to their recovery. The proposed new admission wards would bring the hospital in line with the most modern institutions, and give all necessary facilities for scientific treatment of the inmates.

Changes in Staff.—During the past two years three medical officers have left by transfer to other departments. Five temporary officers have been employed, but for nearly six months one or two positions were absolutely vacant. It is evident there exists a disinclination among medical men to join the lunacy service. In seeking for an explanation of this feeling the most obvious is that the medical staff are paid salaries so much less than they expect to gain in private practice that they will not undertake the somewhat unpleasant and monotonous duties of a medical officer in a hospital for the insane. Even when an appointment is made, the inducements to remain are not sufficient to counterbalance the obvious fact that the salaries attached to the highest positions, those of Medical Superintendents, are much below the income a medical man of ability might fairly expect to obtain in an established practice.

Scientific Work in the Department.—It is desired to increase the facilities for scientific work in the hospitals by fitting up clinical and pathological rooms, and steps are now being taken for this purpose.

Reception Houses for Insane.—In New South Wales at present one reception house is established, at Darlinghurst, Sydney, but steps are now being taken to open a second one at Newcastle. The institution at Darlinghurst has been found of the greatest value in dealing with persons whose insanity is in doubt; it has also intercepted a large number of cases of acute alcoholic insanity. It has hitherto been the custom, in the absence of a reception house, to make use of the local gaol. The objection to the arrangement is the sentimental one of committing an insane person to prison, and this has often a retarding influence on the recovery of the patient by giving the impression that the detention in the gaol is because of some offence and not for illness, and thereby, perhaps, fixing a delusion. To avoid the commitment to gaol, the alternative of utilising the local hospital suggests itself. During the year correspondence on these lines

was entered into with one of the local hospital committees. It is to be regretted that the hospital committee wrote absolutely declining to undertake the responsibility. It cannot but be felt that in taking up this position, which strongly accentuates a distinction between those affected with mental diseases and cases of ordinary sickness, the community is losing sight of the humanitarian view that the insane, because of their affliction with this distressing disease, should be treated as cases of ordinary illness, and not as prisoners or outcasts.

Receipts and Expenditure.—The receipts from all sources amounted to £19,881 1s 9d. The total expenditure amounted to £129,978 14s 10d. The average weekly cost shows an increase of 5½d per patient over that for the previous year, and 2½d over the average for the past ten years. This is explained by the very great increase in the price for provisions, an increase which added to the expenses of the department a sum of £4000.

Queensland.

THE annual report for the year 1901 on the Hospitals for the Insane in Queensland, by Dr. Hogg, states that on the 31st December, 1901, there were 1752 patients in the State institutions for the insane. On the same date in 1900 the number was 1728, so that the number of patients has only increased by 24 during the year. The average addition for the last five years has been 56 patients per year. Of every 1000 of the population nearly 3½ persons (3·43) were under care in institutions for the insane. There has been little variation in this proportion for some time.

Admissions.—During the year 335 patients—193 males and 142 females—were admitted to the hospitals for the insane. Twelve fewer patients were admitted during 1901 than in 1900, and 29 less than in 1899, which so far represents high-water mark as regards the number of admissions.

Causes of Insanity.—In 97 cases out of 335 admitted last year no definite exciting cause of insanity could be clearly made out. In 40 cases there was a distinct hereditary tendency, in 48 there had been previous attacks of insanity, in 33 there had been excessive drinking, in 15 there was coarse disease of the skull and brain, 14 were epileptics, 12 were syphilitics, other 12 were suffering from mental defect from birth, and in 10 female patients the mental trouble followed childbirth and suckling.

Discharges.—One hundred and ninety-four patients—124 males and 70 females—were discharged; 145 as recovered, 47 as sufficiently relieved to be discharged, though still showing some slight mental enfeeblement, and two were removed by their friends in the same state as when admitted. Of the patients admitted during the year, 43·28 per cent. recovered, and 14·03 per cent. were relieved; the total discharges thus forming 57·3 per cent. of the admissions. In 1900 the percentage of discharges to admissions was—36·88 recovered, and 10·34 relieved; total, 47·22.

Deaths.—The death rate, calculated on the average number of patients daily under care, was 6·54: 7 per cent. in the case of males, and 5·8 in the case of females. In 1900 the death rate was 7·29; 31 deaths were due to diseases of the nervous system, 20 to inflammation of the lungs, and 19 to tubercle of the lungs and other organs. The deaths from tubercle were fewer than in the previous year.

Leave of Absence.—At the beginning of the year, 31 patients were absent on leave with their friends. During the year other 87 patients were granted leave. Of the total, 47 were discharged, 32 returned at the end of the leave, 1 died while absent, and 25 were still on leave at December 31st, 1901.

The Staff.—Early in 1901, Dr. T. A. Price and Dr. R. E. Kane resigned their positions as assistant medical superintendents at Goodna. They were succeeded by Dr. L. E. Row and Dr. Herbert Chesson, the latter being transferred from Toowoomba, where his place was filled by Dr. G. W. S. Marr.

Expenditure.—The total amount spent for the year was £46,719 19s 1d. Of this sum, £44,008 17s 1d was spent on hospitals for the insane, and £2711 2s on reception-houses. The total cost of all the institutions was £451 more than last year: £344 in the case of hospitals, and £107 in the case of reception-houses.

Contributions towards Patients' Maintenance.—The Curator in Insanity's collections for the year amounted to £2674 8s 6d, or £1 11s 0½d per head of the average number of patients resident. This is an increase of £362 as compared with last year.

Accommodation.—At Goodna the laundry, scullery, bathrooms, and lavatory additions now being built will be a great comfort to the patients. The old wards of the original buildings on the river bank are still in an unsatisfactory state. The female wards are over-crowded. At Toowoomba both male and female wards are opened to their utmost capacity. It is hoped that some of these difficulties will end during the coming year, when the two wards now being built at Toowoomba are opened. A site for a northern asylum is still under consideration.

Reception Houses.—These were all visited twice during the year, and found in good order. They are under the care of the Government medical officers in the various towns, and they do good work in sifting out the milder cases and saving them from going to hospitals for the insane. In the early part of the year the old Brisbane Reception-house at Countess-street was handed over to the Defence Department, and the institution transferred to a temporary building in the prison reserve at South Brisbane, pending the erection of a new reception-house near by.

OBITUARY.

ANGUS JOHN McDONALD, M.B. (Glas.), Mount Gambier, S.A.

The death is announced of Dr. Angus John McDonald, of Mount Gambier, S.A., a brother of the Mayor (Dr. C. McDonald), after a long illness. He was a native of Mount Gambier, and was 37 years of age. He studied at Glasgow, and was for two or three years surgeon on board an Atlantic liner. He returned to the Mount about six years ago, and soon after had a paralytic seizure. Since then he has done no practice. He leaves a widow and one child.

CHARLES G. LERMITTE, M.R.C.S., L.R.C.P., Adelaide, S.A.

Dr. C. G. Lermite died suddenly from prussic acid poisoning on October 16th. He started practice in 1884 at Salisbury as partner of the late Dr. Nesbit, and subsequently he removed to the city, where he practised and also acted as medical examiner for the Australian Mutual Provident Society. For some years he had practised at Norwood, Kent Town, and Gilberton.

We have received from Messrs. Burroughs, Wellcome and Co., a specimen of "Tabloid" Lithium Citrate and Sodium Sulphate (Effervescent), containing Lithium Citrate gr. 5, with Sodium Sulphate gr. 30. When added to the requisite quantity of water it provides an effervescing draught which should prove of service in gouty and other conditions in which it is desired to administer lithium citrate with a gentle laxative.

PUBLIC HEALTH.

New South Wales.

Precautions against Plague.—At a recent meeting of the City Municipal Council the Mayor said the Department of Public Health was exercising every precaution with a view to preventing a further plague outbreak in Sydney. Unless a certificate of fumigation before leaving an infected port were produced the vessel was fumigated here upon arrival. In addition to this, very careful inspections were made of all shipping.

Vaccination.—From the annual report of the Chief Medical Officer of the Government of New South Wales we learn that 2081 vaccinations were performed during the year 1901 by the Government Vaccinators of New South Wales, of which 2028 were successful. Of the total number, 66 were performed in Sydney and its suburbs, and 2015 in country districts. Public vaccination was performed in only 16 districts. In about 97 districts in which there are Government vaccinators no vaccinations have been reported, and it is presumed none have been performed. Of the successful cases, the patients in 47 cases were under one year; in 307, between one and five years; in 866, between five and ten years; and in 743, upwards of ten years of age. The unsuccessful cases were 53, or 2.45 per cent. of the whole number. The number of births registered in the State during 1901 was 37,826, and the vaccinations give a percentage of 5.5 on this number. In addition to vaccinations performed by Government vaccinators, a number are performed by private practitioners, but of these no returns are made. There is reason to believe, however, that these cases would not add materially to the percentage above given. The Department of Public Health continues to supply pure calf lymph to legally qualified medical practitioners on application.

Vital Statistics.—During the quarter ended September 30th there were 3412 births in the metropolis, equivalent to a rate of 6.79 per 1000 of population, and the deaths were 1506, or 3.00 per 1000. These are respectively 234 and 51 greater than the average numbers for this quarter during the previous five years. The birth rate is, relatively to population, the highest since 1897. The mortality due to zymotic diseases shows a decrease of 23 per cent. below the quinquennial average. This decrease is very marked in deaths from measles, influenza, whooping-cough, diphtheria, typhoid, and diarrhoeal complaints, the combined mortality from these causes being 42, against the average of 110 for the quarter during the previous five years; but an increase is apparent in scarlet fever, puerperal fever, and other zymotics, which give a quarterly number of 72 against the average of 37. Constitutional diseases show an increase on the quinquennial figures from 267 to 293, the excess being mainly caused by an advance in cancer from 81 to 102, the phthisis figures remaining practically stationary. In the Newcastle district the births for the quarter numbered 484 and the deaths were 209, equal respectively to 8.69 and 3.75 per 1000 of the population.

West Australia.

Vital Statistics.—During the quarter ended June 30th, 1902, 1607 births were registered in West Australia, being at the rate of 31.38 per 1000 of the population, and 805 deaths, being at the rate of 15.71 per 1000 of the population; of these deaths 347 were of children under five years of age. The chief causes of deaths were zymotic diseases 160 (typhoid fever 83,

diarrhoea 36); constitutional diseases 87 (cancer 26, phthisis 42); developmental diseases 53 (premature birth 27, old age 23); local diseases 370 (diseases of the nervous system 48, of the circulatory system 54, of the respiratory system 65 (pneumonia 35), diseases of the digestive system 154 (enteritis 119).

South Australia.

Board of Health.—At the last meeting of the Central Board of Health, Adelaide, the secretary to the local board of health for Dalkey wrote requesting this board's approval for dispensing with the services of Dr. C. H. Souter as officer of health on the ground that there was a nearer resident medical practitioner. The local board of health for Mount Crawford submitted for approval the appointment of Dr. E. V. Russell Fooks as medical officer of health at £25 per annum.

Cerebro-Spinal Meningitis.—During the first nine months of this year ten deaths occurred in the State from cerebro spinal meningitis. Several cases have occurred among the workmen at Bundaleer water-works. Dr. Ramsay Smith, chairman of the Central Board of Health, reported that the sanitary arrangements were excellent and had always been most carefully looked after. The only suspicious circumstance connected with the outbreak was the fact that several Indian hawkers were camped within a few yards of where the outbreak occurred, from whom the men purchased clothing and other articles. He suggested that tramps and hawkers be prevented from camping near the works. The Central Board of Health has recommended that this be placed on the list of notifiable diseases under the Health Act.

Vital Statistics.—During the quarter ending July 31st, 1902, 2395 births were registered in South Australia, exclusive of the Northern Territory. The number of deaths recorded during the same period were 1197; of these deaths 205 occurred from zymotic diseases (measles 106, enteric fever 25, diarrhoea 40); 205 from constitutional diseases (cancer 77, phthisis 81); developmental diseases 147, and 522 were the result of local diseases (diseases of the nervous system 54, of the circulatory system 148, pneumonia 65, enteritis 41). In the city of Adelaide 239 births and 255 deaths were recorded during the quarter; of these deaths 51 occurred from zymotic diseases (measles 34, enteric fever 8); 56 from constitutional diseases (cancer 26, phthisis 25); 34 from developmental diseases, and 89 from local diseases (diseases of the nervous system 11, of the circulatory system 27).

HOSPITAL INTELLIGENCE.

Alfred Hospital, Melbourne.—The managers of the Alfred Hospital announce that unless a reduction in the Government grant from £5000 to £3280 per annum is made up from other sources they will be compelled to reduce the hospital accommodation for patients.

Hospital for Sick Children, Sydney.—The board of management of the Hospital for Sick Children recently received from the committee of the Carrington Convalescent Hospital an offer to lease to them a brick cottage, adjoining the grounds of the above-named institution at Camden, to be used by the board of the Children's Hospital as a convalescent home. It was decided to accept the offer of the Carrington Hospital committee. The committee estimate that the cost of furnishing and of effecting a few necessary alterations

to the cottage will be about £250. The additional cost to the hospital of maintaining the home is estimated at £600 per annum.

Melbourne Hospital.—At a special meeting of the subscribers to the Melbourne Hospital held last month, to consider the amended by-laws relating to the honorary medical and surgical staff, as recommended by the committee, the following by-laws were agreed to:—"There shall be ten physicians and ten surgeons—exclusive of specialists—five of whom respectively shall have charge of the in-patients, and five of whom respectively shall have charge of the out-patients."—"Every person elected to the office of physician shall retire from the same on attaining the age of 65, and every person elected to the office of surgeon shall retire from the same on attaining the age of 60; but such physician or such surgeon on retiring from office may be elected consulting physician or consulting surgeon, as the case may be."—After considerable discussion, the following proposals were withdrawn:—"Every physician and surgeon hereafter elected by the governors as a member of the honorary medical staff shall, subject to the by-laws of the hospital now or hereafter in force, hold office for a period of eight years, at the end of which term he shall be eligible for re-election."—"No physician or surgeon to in-patients shall hold office other than consultant on the medical staff of any other metropolitan hospital." It was announced that the amount of the subsidy granted to the Hospital by the Government had come down from £15,000 a year in 1884, and £14,000 up to 1893, to as low as £9840. The reduction of the charity vote would be a considerable embarrassment to the Hospital.

The Women's Hospital, Sydney.—The monthly meeting of the board of management of the Women's Hospital was held at the Equitable Building on October 27th. Judge Backhouse (president) occupied the chair. The honorary general secretary of the Hospital Saturday Fund wrote asking that one of the executive officers should be appointed a life governor of the Women's Hospital. The request was granted. A letter from Madame Melba, enclosing a cheque for £50, was acknowledged with thanks. Mr. Fell, hon. secretary, intimated that Lady Rawson (patron) had visited the hospital on October 24th. Lady Fairfax was also present. Lady Rawson inspected the wards, and expressed the pleasure it gave her to see everything in order, and also her appreciation of the good work carried on at the hospital.

A New Dispensary for Women.—The formal opening of the newly established out-patient department in connection with the Home Training School and Lying-in Hospital, Stanley-street, Newtown, Sydney, took place recently. Mrs. C. F. Roberts performed the opening ceremony. There were present, amongst others, Dr. Walter Spencer, Dr. E. P. Sandes and Dr. Richard Arthur.

The Fever Hospital, Melbourne.—The receipts from all sources for the building of this hospital totalled £22,505 1s 1d. The amounts already paid out aggregate £23,966 3s 7d, and there remains to be paid for completion of current contracts a sum of £1778 12s 8d, making together a total of £25,744 16s 3d, so that the excess of expenditure over receipts is £3239 15s 2d. There is a bank overdraft of £1461 2s 6d, which with the £1778 12s 8d due on contracts makes up the total shortage mentioned. The cost of furnishing the hospital has been estimated at £2000, and the probable maximum cost of maintenance of the institution at £6000 per annum. Before the hospital can be opened for the reception of patients a sum of £3239 15s 2d must be forthcoming, and, in addition, at

least £2000 more must be raised for equipment. These difficulties were laid before the Premier recently by a deputation from the committee. Sir Samuel Gillott said the Premier of the late Government had promised to provide £4000 extra in two yearly sums, and in consequence of that promise an overdraft of £4000 had been obtained. The Premier said in this case money had been promised for a particular work which had in consequence been carried out. He, therefore, considered that the Government should make good the sum of £2000, the amount which had been placed on the estimates. As to the request that the Government should take any responsibility for the maintenance of the hospital, he could hold out no hope whatever. He did not wish to give a final opinion, but the management of the new hospital would be wise if it anticipated that the Government would take the view he had put forward.

Adelaide Hospital, South Australia.—In the annual report of the Board of Management of the Adelaide Hospital for 1901 it is stated that there were in hospital on December 31st, 1901, 183 patients; admitted during the year 1901, 3371; total, 3554. There were cured or convalescent, 1958; relieved, 790; unrelieved, 372; died, 282; in hospital on December 31st, 1901, 209. Average number resident daily, 250; mean residence, 25 days; rate of mortality, 7.9 per cent.; number of out-patients, 17,233; number of operations performed, 1255. The number of cases of enteric fever treated is more than double that of last year, the deaths, however, bearing a lower percentage. Negotiations were completed, and all difficulties were removed in connection with the return of the honorary staff; and after allocation of the work and wards the appointed staff entered on their duties at the end of February and the beginning of March. A number of students immediately followed, and the medical school was re-established, and one of the most serious and lasting episodes—extending over five years—in the history of this or any other hospital was terminated. Dr. Ramsay Smith applied for leave to go to South Africa on the understanding that, if allowed, he would resign his position as honorary physician in favour of a paid appointment as physician to the isolation wards. This arrangement was ratified by the Government. Dr. Napier became surgeon and gynaecologist to the hospital instead of senior surgeon. Drs. Niesche, Rogers, Shepherd and Bickle were reappointed as honorary medical officers. A great loss to the hospital and State was sustained by the death of Dr. E. W. Way, who had for so many years been a prominent member of the board and staff. The University requested the board to nominate Dr. J. A. G. Hamilton, who had been doing the late Dr. Way's work, as gynaecologist, which request the board acceded to. It was resolved to appoint two honorary assistant gynaecologists, an honorary bacteriologist, and an assistant bacteriologist, and it is hoped that the laboratory will be fitted up and in full swing before long. It was found that the X-rays apparatus could not be properly looked after in the out-patients' department, and a room was prepared in the main building which answers the purpose until proper accommodation for this and other appliances is provided. The expenditure for 1901 reached the large amount of £20,103 12s 8d, being at the rate of £75 12s 11d per bed occupied per annum. This was caused by an increase of 335 indoor and 1843 outdoor patients treated, also by the increased cost under some of the contracts; but it is hoped that this sum will be lessened next year, owing to the action of the Finance Committee, although the increase, owing to the Federal tariff, will be considerable.

The Coast Hospital, N.S.W.—The annual report of Dr. Ashburton Thompson, Chief Medical

Officer of the Government, states that the number of patients remaining in on December 31st, 1900, was 233; 2888 were admitted during the year, the total number under treatment thus having been 2921. Of the total, 2169 were discharged, while 168 died; the mortality was 5.75 per cent. The average daily number of occupied beds for the year was 255.5, being an increase of 41.1. The average stay of patients in hospital has been 31.24 days. The number of cases of enteric fever admitted during 1901 was 214, as against 247 during 1900, a decrease of 33; the percentage of deaths being 10.19. 146 cases of measles were admitted as against 29 for 1900. One death took place from measles, two from measles and broncho pneumonia, and two from measles and whooping-cough combined. 192 cases of scarlet fever were admitted, against 125 in 1900; five deaths took place from this disease. 72 cases of diphtheria were admitted, as against 10 during 1900; four were fatal. 28 cases of whooping-cough, with broncho-pneumonia, were admitted, of which eight died. Dr. W. B. Violette continued in the office of medical superintendent until July 31st, 1901, when he was succeeded by Dr. A. G. Heury. The posts of house surgeons were filled as follows:—Dr. R. R. Hardman, to March 26th; Dr. R. A. Fox, from March 27th; and Dr. Ada C. Affleck, from the beginning of the year. The annual cost per bed was—for maintenance and treatment £56 13s 0½d, for the ambulance service £5 13s 5d, and for repairs £2 11s 2½d; total, £64 17s 8½d.

PERSONAL ITEMS.

Dr. Leonard Pinchin, one of the resident medical staff of the Hobart General Hospital, has been appointed by the medical board of Mathinna to the practice on that important mining field.

Sir James Graham, M.D., has returned to Sydney from an extended trip to the East, America, and Great Britain, and has resumed practice.

Dr. W. H. Goode has resigned his appointment as honorary surgeon to the Sydney Hospital. At the last meeting of the board of directors the resignation was received with regret, and it was resolved to thank Dr. Goode for his long and faithful services.

A valedictory dinner was tendered to Dr. F. S. Sturgess by leading citizens of Wellington (New South Wales) on October 22nd. Dr. Sturgess for the past 12 months has acted as *locum tenens* for Dr. Charles Rygate.

We are glad to report that Dr. F. G. Connor, of Lisamore, is making satisfactory progress towards recovery after a severe attack of pneumonia.

Dr. Goldie, of Auckland, New Zealand, who has been in bad health for some time past, has been for a three months' holiday. He was returning in the ill-fated "Elingamite," but was fortunately saved. Dr. Dixon was his *locum tenens*.

Drs. Eccles and Reekie have gone into partnership. Dr. Eccles is to stay at Mangonui and Dr. Reekie at Kaitiaki.

Drs. Redman and King, of Blenheim, have dissolved partnership, and Dr. Noonan (late Tasmania) has joined Dr. Redman. The latter gentleman has been appointed

resident surgeon to the Picton Hospital, in place of Dr. Claridge, resigned, and Dr. Noonan has taken over the Blenheim practice.

Dr. Finch, of Napier, who acted as District Health Officer during the absence in England of Dr. De Lisle, is at present in Wellington.

Dr. Routh has resigned his position at the Richmond Hospital, Hughenden (Queensland), and is going to England.

Dr. Gresswell, who for several weeks was engaged on the "Drayton Grange" inquiry, resumed his duties as Chairman of the Public Board of Public Health, Melbourne, on October 28th.

Dr. Bennett, who has been appointed house physician at the Auckland Hospital, *vice* Dr. Teague, resigned, was a passenger in the *Elingamite* and was one of the saved.

The vacancy at the Northern Wairoa Hospital has been filled by the appointment of Dr. J. B. Wilson, late of Huntly, Waikato.

Dr. Andrew Stenhouse, of St. Bathans, Dunedin, was on September 11th, prior to his departure for Balclutha, the recipient of a very elegant illuminated address. The inhabitants of St. Bathans and neighbourhood asked his acceptance of the address as a reminder of the many pleasant days he had spent in St. Bathans. Dr. Stenhouse suitably replied.

Mr. C. R. Blackett, F.C.S., the late Victorian Government Analyst, died at his residence, South Yarra, last month, aged 71 years. As Government Analyst he was often associated prominently with important trials, in which he gave expert professional evidence. The last instance was the trial of Tisler for the Dandenong murder.

Dr. W. J. Tilley, late of North Sydney, has removed to Lismore (N.S.W.).

Dr. Philip Thornton, who has recently been residing at Southport for the benefit of his health, has returned to Ipswich, Queensland, and resumed duty as superintendent of the hospital.

Surgeon-Major Sidney Skerman, of the New Zealand Volunteer Medical Staff, has been awarded the Colonial Auxiliary Forces Officers' Decoration, he having a total efficient commissioned service counting towards the decoration to the 17th September, 1902, of 20 years three months and 14 days.

Dr. C. E. Corlette has removed to 28 College-street, Sydney.

Dr. Tremearne, of Creswick, Victoria, was presented, on the eve of his departure for Melbourne, by the Mayor, on behalf of the townsfolk, with a sovereign case, and Mrs. Tremearne was presented by Sir Alex. Peacock, on behalf of many friends, with a handsome pearl pendant and gold brooch.

Dr. Newton, formerly of Cobar, has commenced practice at Cummoek, New South Wales.

Dr. J. J. Power has returned from a trip to England and has resumed practice at College-street, Sydney.

Dr. J. B. McLean has resigned his appointment as Assistant Medical Superintendent at the Hospital for the Insane, Toowoomba.

MEDICAL NOTES.

Hospital for the Insane, New Norfolk (Tas.)—Some additions are now in progress in connection with that portion of this institution known as the Ladies' Cottage. These, when completed, will give accommodation for 50 beds, all of which will be occupied at once. There are now in the hospital 441 patients, the largest number that has ever been there. These additions will relieve the overcrowding to a considerable extent.

Medical Man Wanted at Carnarvon (Tas.)—The residents of the Carnarvon district are endeavouring to raise a guarantee of £200 per year for a resident medical man. At present the nearest doctor is the one at Sorell, and as the travelling expenses are considerable, there are very few residents who could afford to pay the fees for his attendance.

Queen Victoria Homes for Consumptives.—At the last meeting of the Advisory Building Committee the honorary secretary reported that in company with Dr. Sydney Jones and the honorary architects he had visited Wentworth Falls, and reported that the buildings for the new sanatorium were nearing completion. On the recommendation of the honorary architects the following work was approved of:—The inside of wards, dining-room and sitting-room to be painted and varnished; the cottage which is to be used as administrative quarters to be painted both inside and out; the fixing of several extra tanks for the storage of water, etc.; all the additional work to cost £291. The honorary architects were instructed to prepare plans and obtain estimates for cost of building a cottage for the resident medical officer. The sanatorium, which is to accommodate 20 male patients, will be opened early in the coming year, and only those suffering in early stages of the disease will be admitted.

Charitable Donations and Bequests.—Madame Melba has made a donation of £50 to the funds of the Women's Hospital, Sydney; £100 to the Hospital for Sick Children, Sydney; £100 to the Sydney Hospital; £100 to the Brisbane General Hospital; and £50 each to the Children's and Lady Lamington Hospitals. The owners of the Melbourne Cup winner have donated £200 in equal parts to the General and the Children's Hospitals in Melbourne and in Adelaide. A legacy of £61 10s to the Sydney Hospital, payable in five years, was received from the executors of the late J. S. Harrison. The Women's Hospital, Melbourne, committee have received a cheque for £146 as a donation from the estate of the late Mr. T. B. Payne.

The Kew Asylum Charges.—The board which recently inquired into the charges of unfitness for duty against Dr. Stuart Macbirnie, of the Kew Lunatic Asylum, Victoria, have found that the charges were not proven. The true gravamen of the accusation was not so much that Dr. Macbirnie had been unfit for duty on a particular night, but that he drank to excess, and particularly that he was in the habit of taking drugs; but this allegation has been pronounced in unequivocal terms not proven. The matter, as far as he is personally concerned, is therefore at an end.

CERTIFICATED NURSE, P.A.H. Sydney, L.O.S. Eng., desires to hear from medical man re opening for Private Hospital in country town.—BETA, G.P.O., Manly.

MEDICAL APPOINTMENTS.

NEW SOUTH WALES.

Campbell, Alfred, F.R.C.S. Edin., etc., to be Government Medical Officer and Vaccinator at Young, *vice* Dr. J. T. Heeley, resigned.
Graham, Edward Alfred, M.B., B.Ch. Melb., to be Government Medical Officer and Vaccinator at Deniliquin, *vice* Dr. A. W. F. Noyes, deceased.

VICTORIA.

Cole, Dr. F. Hobill, to be Examiner in Pharmacy and Materia Medica in the University of Melbourne.
Plowman, Sidney, F.R.C.S., to be Examiner in Pharmacy and Materia Medica in the University of Melbourne.
Read, Stanley J. Docker, M.B., to be Public Vaccinator for the Northern District and Officer of Health for the Borough of Raywood.

QUEENSLAND.

Butler, A. G., M.B. Camb., to be Health Officer for the Port of Gladstone, Medical Officer at Gladstone, and a Health Officer for the purposes of "The Health Act of 1900," *vice* M. M. Lyons, M.B. Melb., resigned.
McDonald, Dr. J. F., to be Health Officer for the Port of Brisbane, also Health Officer for the purposes of the Health Act of 1900.

WESTERN AUSTRALIA.

Barber, Dr. G., to be Honorary Ophthalmic Surgeon to the Kalgoorlie Hospital.
Elgee, Dr., to be Officer of Health for Bellevue.
Harrison, Dr. W. A., to be District Medical Officer, York.
Rindor, A. W., M.R.C.P., to be Surgeon to the Broad Arrow Hospital.
Scott, Dr. G. M., to be Honorary Ophthalmic Surgeon to the Kalgoorlie Hospital.

NEW ZEALAND.

Bennett, Dr., to be House Physician at the Auckland Hospital.
Wilson, Dr. J. B., to the vacancy at the Northern Wairoa Hospital.

The following to be Public Vaccinators for the districts set opposite their names:

Edgar, John James, L.R.C.P.S., Napier.
Fleming, William Alexander, M.B., M.S., Catlin's.
Harrison, George Alfred, M.R.C.S., Eltham.
Toswill, John Cecil, M.B., etc., Hastings.

TASMANIA.

Deane, Charles Maalen, M.D., M.R.C.S., to be Port Health Officer and Medical Officer to Police, Gaols and Paupers, Strahan, *vice* P. J. Godfrey, L.R.C.P., L.R.C.S., L.F.P.S., L.M., resigned.

JUSTICES OF THE PEACE.

NEW SOUTH WALES.

Dalton, Henry Moyer Cyril, M.B., Murrumburrah.
Hoaking, John Edward Francis, M.R.C.S., etc., Deniliquin.
Kelly, Robert Vandeleur, C.B., L.R.C.P., etc., Delegate.

WESTERN AUSTRALIA.

Gray, Dr. Colin, for the Plantagenet Magisterial District.
Molony, Dr. P. J., of Carnarvon.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

NEW SOUTH WALES.

Ambrose, Theodore, M.Ch. Univ. Sydney 1902.
Kerwin, Patrick James, L.R.C.P. Edin. 1901, L.R.C.S. Edin. 1901, L.F.P.S. Glas. 1901.
Leva, Johann, M.D. Univ. Zurich, State Exam. Certif. Zurich 1899.
Martin, John Wilson, M.D. Univ. Edin. 1893.
Rygate, Charles Daniel Hartley, D.P.H.R., C.P.S. Irel. 1902.
Sharp, Walter Alexander Ramsay, M.Ch. Univ. Sydney 1902.
Webb, Fritz William, M.Ch. Univ. Sydney 1902.

TASMANIA.

Wilkinson, Arthur Norris, M.B.C.S. Eng. 1895, L.R.C.P. Lond. 1895.

BIRTHS, MARRIAGES AND DEATHS.

BIRTHS.

BURGE.—September 30th, at Ravenswood, Waverley (New South Wales), to Dr. and Mrs. S. Bruce Burge—a son.
HIGGINS.—On September 13th, at Ellery-street, Wood's Point (Victoria), the wife of John Higgins, L.R.C.S. Edin.—a son.
HINDER.—October 28th, at Carleton, Summerhill (New South Wales), the wife of H. Critchley Hinder—a son.
HODGES.—At Port Chalmers (New Zealand), on September 20th, the wife of George Hodges, M.B.—a daughter.
KING-SCOTT.—On October 24th, 1902, at Weyanoke, Queenscliff (Victoria), the wife of John D. King-Scott, M.B., Ch.B.—a son.
L'ESTRANGE.—On October 17th, at Charleville, the wife of Dr. Henry L'Estrange, of a daughter.
MACDONALD.—On September 25th, at 148 West-terrace, Adelaide (South Australia), the wife of Dr. D. MacDonald—a son.
MORRIS.—On October 28th, at Kembla House, Port Adelaide (South Australia), the wife of Dr. E. W. Morris—a son.
WEIGALL.—On October 8th, at Orom-Tara, Cheltenham (Victoria), the wife of Gerald Weigall, M.B.—a daughter.

MARRIAGES.

DAISH—LEAHY.—On the 17th September, by the Rev. Robert McNair, William Daish, M.D., Melbourne, to Ruth Ashenden, second daughter of the late Alfred Leahy, Shepparton Park, Shepparton.
HAY—PUCKLE.—On the 10th September, at St. John's Church, East Malvern (Vic.), by the Rev. J. Gason, John Binny Hay, C.M.G., M.B. & C.M. Edin., son of the late George Charles Hay, M.D., to Edith Mary, third daughter of the late Walter Summers Puckle and Mrs. Puckle, Southwood Lodge, Malvern.
READ—HAYLOCK.—On the 15th October, at Springhurst, Victoria, Stanley Docker Read, M.B., Ch.B., of Eaglehawk, son of Jas. C. Read, of Springhurst, to Florence Alice, daughter of the late Alfred J. Haylock, of Rockhampton, and granddaughter of the late Dr. T. B. Haylock, of Sydney.

DEATHS.

MORSON.—November 16th, at North Sydney, Alexander Kinnear Morson, M.D., formerly of West Maitland.
PINCOTT.—On the 18th October, at Virginia-street, Newtown, Geelong (Vic.), Rupert Pincott, M.R.C.S., in his 84th year.

BOOKS RECEIVED.

Death and Sudden Death. By Prof. P. Brouardel and F. Inoss Benham, M.D., B.S. Second edition. London: Baillière, Tindall & Cox. Sydney: L. Bruck. Price, 10s 6d.
Transactions of the American Dermatological Association at its 31st Annual Meeting. Official Report of the Proceedings. By Frank Hugh Montgomery, M.D., secretary, Chicago, Ill.
A System of Physiologic Therapeutics, a practical exposition of the methods, other than the drugging, useful in the prevention of disease and in the treatment of the sick. Edited by S. S. Cohen, M.D.
Vols. III and IV.—Climatology, Health Resorts, Mineral Springs. By F. P. Weber, M.D., F.R.C.P. Lond., with the collaboration for America of Guy Hinsdale, M.D. P. Blakiston's, Son & Co., 101½ Walnut-street, Philadelphia. Sydney: L. Bruck, 15 Castlereagh-street. Price, 10s per vol.

MISS WARD, late Matron of the Yass District Hospital, having opened a Private Hospital at Yass under the supervision of Drs. Thane and English, is prepared to take in a few cases of incipient Phthisis for treatment. Terms, from Two Guineas a week and upwards. Apply to Miss WARD, "Llawhaden," Private Hospital, Yass.

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Mr. W. A. Dixon, F.I.C., F.C.S., Public Analyst of Sydney, after making exhaustive tests, says:—"There is no doubt but that 'Eumenthol' Jujubes have a wonderful effect in the destruction of bacteria and preventing their growth. . . . I have made a comparative test of 'Eumenthol' Jujubes and Creosote, and find that there is little difference in their bactericidal action."

AUSTRALASIAN MEDICAL GAZETTE.

NOTES ON PYLORECTOMY FOR CANCER.

By A. MacCormick, M.D. (Edin.), (Hon.) F.R.C.S. (Eng.), Lecturer on Surgery in the University of Sydney, Hon. Surgeon to the Prince Alfred Hospital, Sydney.

As this is an operation that has no very great hold on British surgeons, I thought it might interest you if I were to give some of my experiences of it. I first performed pylorotomy in 1890, and the patient lived about seven years; but I am confining my remarks to-night to the operations performed by me during the last three years, as I have had some difficulty in tracing my cases between 1890 and 1899. The number of my pylorotomies during this period has been six, and of these four were alive, and well when last heard of. Of the remaining two, one died of secondary hæmorrhage from the portal vein 17 days after operation, and the other of bronchitis one month after operation.

Case I.—R.W., male, aged 49, was admitted into Prince Alfred Hospital, December 13th, 1899, complaining of pain in the epigastrium, of wasting and vomiting. On examination the muscles were found to be on guard over the epigastric region, but no definite tumour could be made out. On January 9th, 1900, the pylorus and about one-third of the stomach were removed, as were also some enlarged glands. The stomach was closed by direct suture of the divided ends. The patient left the hospital on February 1st. I saw him again about six months ago, *i.e.*, two years and a-half after the operation, when he was apparently in perfect health, and there were no stomach symptoms.

Case II.—F.P., aged 43, male, was admitted to Prince Alfred Hospital on March 28th, 1901, complaining of a sensation of weight and fulness after food, with occasional vomiting, immediately or at irregular intervals after taking food. The patient was anæmic and cachectic-looking, emaciated, and the abdomen retracted. A cylindrical growth, about 2½ in. long, could be felt in the pyloric region, hard, movable, and not tender. April 4th, 1901: On opening the abdomen the tumour was found fairly extensive, and encroached on the duodenum more than usual in such cases. Gastrojejunostomy was performed, but as the patient stood this operation so well I determined to excise the growth. This was done, and the divided ends of the stomach and duodenum sutured blindly, and dropped back. Everything

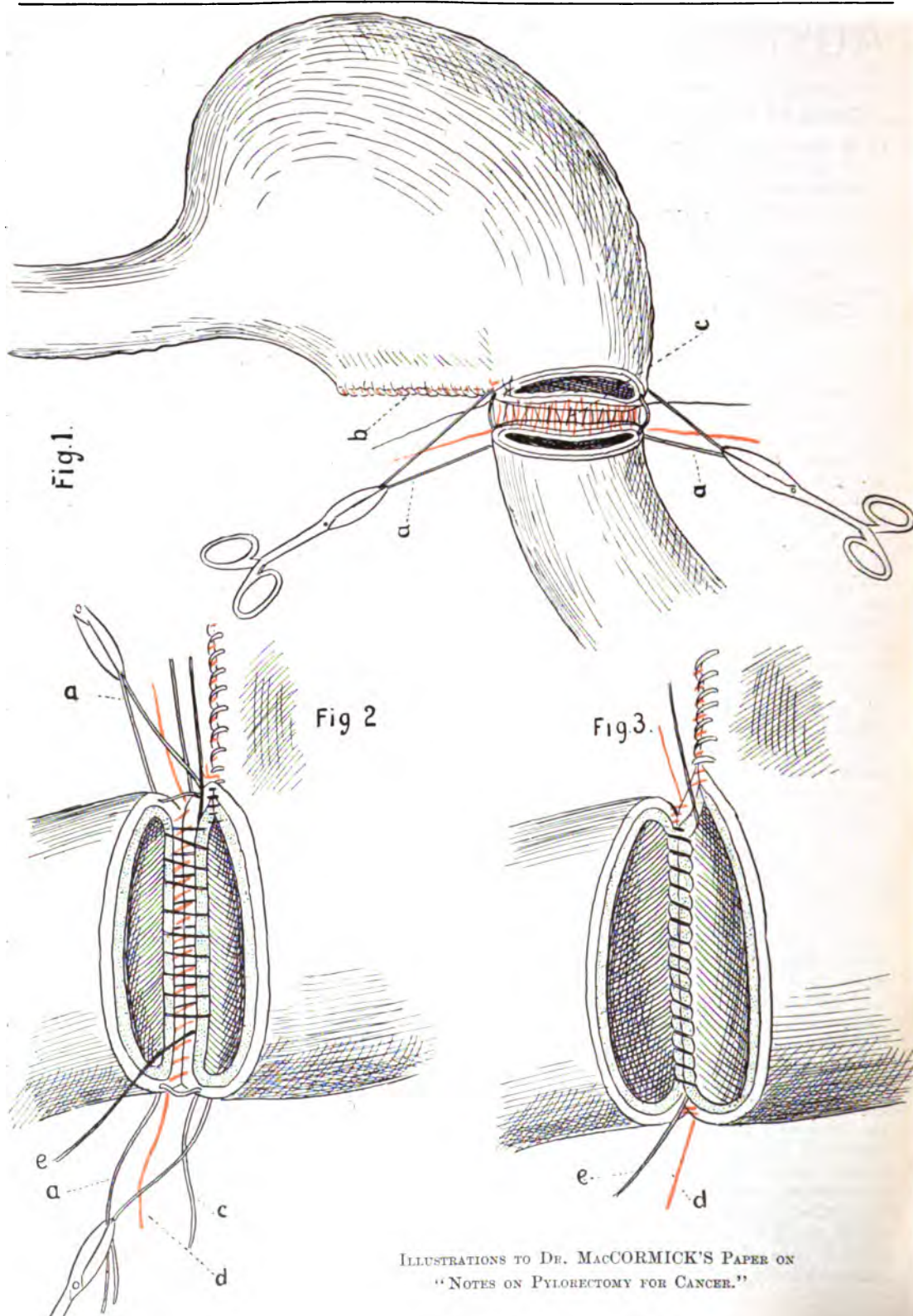
went well until the 20th, when the patient became suddenly collapsed, passed blood by the rectum, and gradually sank and died. Post-mortem: Ulceration into the portal vein at the blind end of duodenum.

Case III.—A.K., aged 50, female, was admitted to Prince Alfred Hospital July 22nd, 1901, complaining of vomiting and of a movable tumour in the abdomen in the region of the pylorus. August 8th: Pylorotomy was performed by Kocher's method. The case was an eminently suitable one for operation, which was executed within the hour. The patient suffered little or no shock, and made a rapid recovery. She now expresses herself as perfectly well.

Case IV.—M.C., aged 59, male, admitted to the Prince Alfred Hospital January 13th, 1902, complaining of wasting and vomiting. The stomach was found to be much dilated, and the patient vomited a large quantity twice a week. A movable tumour could easily be felt in the region of the pylorus. January 19th, 1902: Pylorotomy was performed and direct suture of the divided ends accomplished. Recovery was delayed somewhat on account of bronchitis, which disturbed the patient much. He was discharged February 22nd, 1902. I saw him a short time ago, prior to his leaving for England; he looked well, felt strong, and there were no stomach symptoms.

Case V.—J.C., male, aged 55, admitted to Prince Alfred Hospital April 30th, 1902, complaining of a large abdominal tumour, of vomiting, and of wasting. The tumour was larger than a cricket ball, and could be moved from one side of the abdomen to the other. May 8th: The greater part of the stomach was removed and direct suture of the divided ends carried out. The tumour projected into the cavity of the stomach, was fungated, and smelt very foul. The patient's progress was at first satisfactory, but at the end of ten days the abdominal incision gave way and had to be re-sutured. Union of the abdominal incision occurred satisfactorily, but at the end of four weeks the patient succumbed to an attack of bronchitis. During the last 14 days he was taking full quantities of food and stimulant by the mouth.

Case VI.—Mrs. H., aged 63, was admitted to "The Terraces" Hospital on July 22nd, 1902, complaining of vomiting and of a sensation of fulness after taking food. A large pyloric tumour could be felt. August 3rd: The pylorus was excised with a considerable



ILLUSTRATIONS TO DR. MACCORMICK'S PAPER ON
"NOTES ON PYLORECTOMY FOR CANCER."

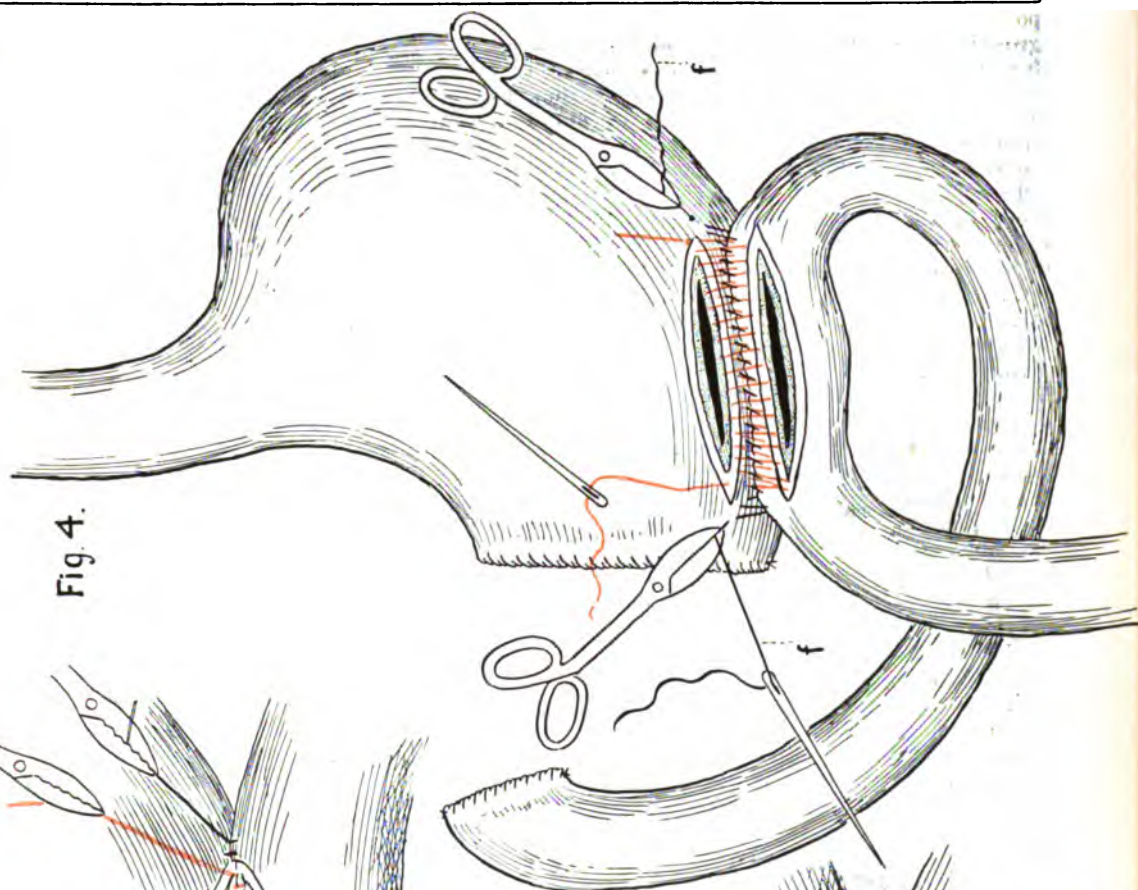


Fig. 4.

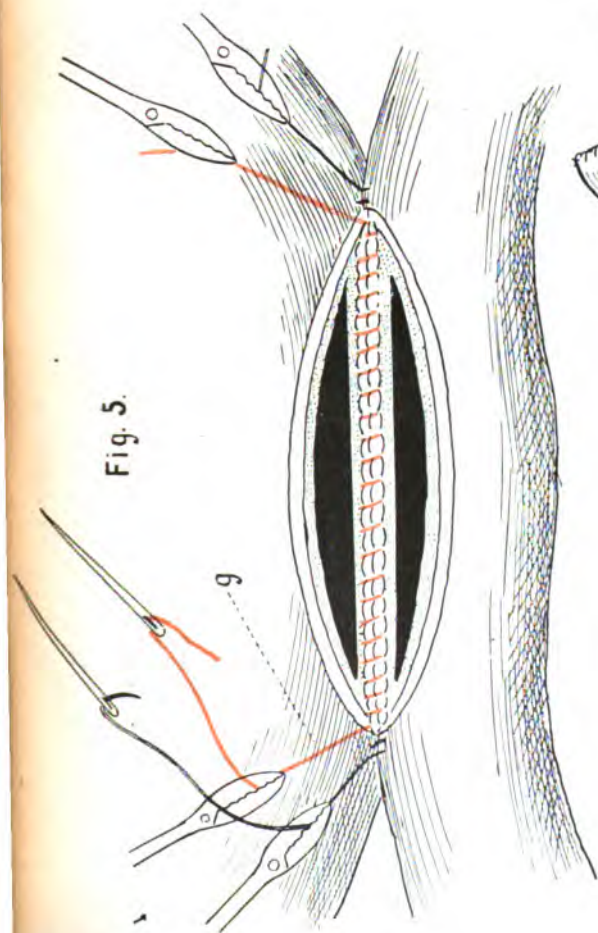


Fig. 5.

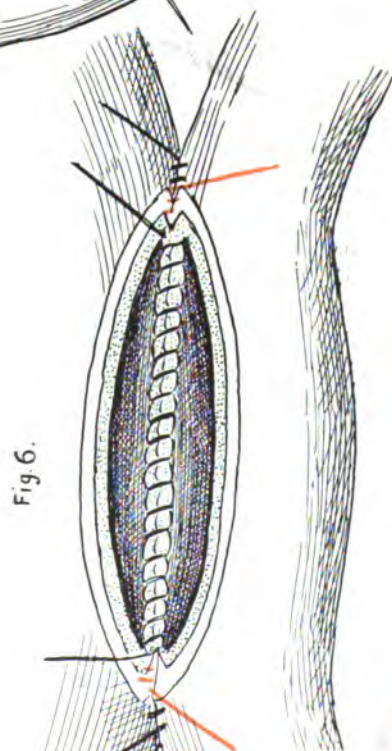


Fig. 6.

portion of the body of the stomach. The growth encroached towards the duodenum so far as to leave very little free end, rendering direct suture very difficult; therefore the duodenum and stomach were sown up blindly and anterior gastro-jejunostomy performed. The patient vomited bile on several occasions, but otherwise made a very good recovery, and left the hospital on August 28th. When last heard of was in very fair health.

In performing these operations I have used three recognised methods of operating:—(1) Kocher's method, (2) direct suture of the divided ends, and (3) gastro-jejunostomy, with blind suture of the ends of the stomach and duodenum. Of these three methods I prefer the two latter, and if the parts come readily together and there is plenty of free duodenum I select direct suture. If much stomach has to be removed, or if there is little duodenum available, I prefer gastro-jejunostomy, with blind suture of the stomach and duodenum. On the mechanical details of these operations depend a good deal of the success and expedition with which they can be performed.

I will now describe shortly the methods which I adopt:—(1) *Lavage of the stomach.* This should be practised daily for seven or ten days, and then half an hour before the operation. (2) *Incision.* So far, I have used the median incision with excision of the umbilicus. A pillow placed under the trunk will bring the pylorus nearer the surface. (3) *Freeing the diseased pylorus.* The usual precautions to prevent soiling of the peritoneum having been taken, I ligature the main vessels supplying the diseased parts about half an inch beyond the proposed line of section. These main vessels are: Left gastro-epiploic, right gastro-epiploic, pyloric and coronary arteries. It is then a simple matter to ligature off the remainder of the omentum and to free the pylorus. (4) *Removal of the diseased parts.* The stomach and duodenum having been clamped by means of Doyen's forceps, applied on either side of the line of section, so as to ensure no escape of gastric contents or of cancer debris, I use a strong pair of scissors to rapidly remove the tumour. (5) *I reduce the size of the opening in the stomach to fit the duodenum by a series of continuous sutures* (Fig. 1b). The first suture takes up the gastric mucous membrane alone, and when this is completed one of the two pairs of forceps which have been applied to the stomach is removed, and any bleeding points in the walls of the stomach are controlled by ligature. The second suture brings together the cut edges of the muscle and peritoneum, and stops short of the first at its lower end. The

third suture, which may not be inserted till a later stage, takes up a sero-muscular layer a little way from the already sutured cut edge (Lembert's method). The openings in the stomach and duodenum are now approximated, and first a continuous suture passed through the sero-muscular layer of the posterior surface of the stomach and duodenum (Fig. 1c). The suturing is left off at the lower border of the stomach, and a pair of forceps is applied to the suture so that it may be safe until taken up at a later stage. The clamps may be removed now, or at an earlier stage if the duodenum is very short, when the lower borders of the stomach and duodenum can be steadied by a loop of thread passed through them so as to prevent version. (See figures 1 and 2A). A second suture (Figs. 1 and 2b) secures the cut edges of peritoneum and muscle of both viscera, and is left in the same way as the first. A third continuous suture (Figs. 2 and 3x) commences at the upper part of the openings of stomach and duodenum, and takes up the mucous membrane only. This suture is carried around the whole circumference of the opening, and when completed and knotted, shuts in the cavity of the stomach. The second suture is then picked up and carried right round and knotted. The first suture is then similarly picked up and carried round the sero-muscular coats and ligatured where it commenced. A few more sutures may be necessary at the angle of the "occlusion" and "ring" sutures. There are thus now three tiers of sutures all round, and I think this is much better than taking up all the coats with one suture, because the bleeding can be controlled with greater security. (6) *The abdominal wound is closed in the usual way.*

With this method I have never had leakage of the contents of the stomach, nor peritonitis, and I am in the habit of giving food by the mouth fairly early—solid food in about ten days. The union of the mucous membrane being accurate there is less surface exposed for septic absorption, and there is less tendency to cicatricial contraction.

The second method which I practise is combined gastro-jejunostomy and pylorotomy (Fig. 4). When much stomach has to be removed and when the duodenum is fixed, and much involved, this is the best operation and the most rapid. The diseased pylorus is freed, clamped and removed. The divided ends of the stomach and duodenum are closed with three continuous sutures, the first suture taking up mucous membrane, the second the cut edge of the muscle and peritoneum; and the third, the sero-muscular layer, as already described. Anterior gastro-jejunostomy is then performed

in this way:—The forefinger of the left hand is passed down and to the left into the abdominal cavity, pushing the large intestine and omentum to the right, and hooking up the commencement of the jejunum opposite the body of the second lumbar vertebra. Eighteen inches of jejunum are passed through the fingers. A loop of jejunum is brought out of the abdomen, and is applied to the anterior wall of the stomach, half an inch above the greater curvature, and at a convenient distance from the blind sutured end of the stomach. The loop of intestine is arranged so that the flow in it corresponds to the direction of the normal current in the stomach. A continuous suture is then used to bring the sero-muscular coats of intestine and stomach together, along a line some $2\frac{1}{2}$ inches long, and fixed with a pair of forceps as in Figure 4*r*. An incision about $1\frac{1}{2}$ inches long is then made, about $\frac{3}{4}$ of an inch from this suture, through the serous and muscular coats of stomach and intestine. All bleeding is stopped, and then a second continuous suture on the left is commenced so as to bring the cut edges of serous and muscular coats together (Fig. 5 *c*), and fixed to the right, as in the first suture. The mucous membrane of the stomach and intestine is then opened a little short of the incision in the serous and muscular layers, and a third continuous suture is commenced on the left, taking up the mucous membrane alone. This suture is carried right round and knotted where it started, thus shutting off the cavity of the stomach. The second suture is then picked up and carried round the cut edge of the serous and muscular coats and knotted where it started. The first suture is treated in the same way. This operation can be performed very rapidly, and causes very little shock, and in cases where the pylorus be fixed the treatment may be limited to this.

The immediate cause of death in my two fatal cases was not such as is usually associated with abdominal operations. In the first fatal case the disease was far advanced, and was adherent to the head of the pancreas. In the second, the patient's circulation was so weak that there was a tendency to hypostatic congestion, and there was little power of repair.

Taking into account the fact that glandular infection is very late in cancer of the alimentary canal, I am of opinion that if we had an early and sure means of diagnosing pyloric cancer, the results of removal would be more favourable than in cancer of the mamma.

(Read before the New South Wales Branch of the British Medical Association.)

Dr. J. C. Muir has agreed to temporarily retain his position as resident medical officer of the infirmary department of the Women's Hospital, Melbourne, his salary to be at the rate of £200 per annum.

THE BLOOD IN ENTERIC FEVER.

By Sydney Jamieson, M.B., C.M. (Edin.), Director of Pathological Department and Hon. Physician Sydney Hospital, and H. Skipton Stacy, M.D., Ch.M. (Syd.), late Resident Pathologist, Sydney Hospital.

THIS article, which comprises the results of examinations of all typhoid fever cases in the wards of Sydney Hospital during 18 months or so, deals with the corpuscular elements of the blood only, space being too limited to deal with the Widal reaction. We venture to say that the enumeration of the white corpuscles in a case of suspected enteric ranks amongst the most valuable of all laboratory tests. Knowing their number per cmm., with the aid of a few clinical facts one may speak, as a rule, definitely for or against typhoid. After a slight experience with the hæmocytometer it is comparatively simple. We selected the lobe of the ear from which to get the blood, drew the blood up into the tube to a certain height, and then diluted 20 times with $\frac{1}{2}$ p.c. acetic acid. After being shaken up a drop is put on the cell of the Thoma-Zeiss slide and the corpuscles counted. (This is the technique for the white; the counting of the red is unnecessary.)

Red Cells.—Only in eight cases were these counted, and in those found to be practically normal. Thayer (Johns Hopkins Hospital report) finds that there is a steady diminution throughout the disease; this is made up again, however, during convalescence. There is a corresponding or slightly greater decrease in hæmoglobin.

White Cells.—Almost invariably these are normal or diminished in number; as a rule the decrease is in the severe cases or in the later stages of others. The decrease is at the expense of the neutrophiles. In the presence of complications the white count may rise, but it frequently does not. Looking at the table it will be seen that *thrombosis*, *lobar pneumonia*, *septic peritonitis* (following perforation) and *severe hæmorrhage* failed to cause a leucocytosis. On the other hand, *pneumonia* and *syphilis* superadded to one case caused a leucocytosis of 25,000.

An incipient ulcer in the groin, whooping-cough, secondary syphilis, and severe laceration of the brain all caused a leucocytosis. This leaves only two cases of leucocytosis unaccounted for by a known complication, viz., of 11,300 and 16,400. In the first of these the patient was very bad at the time, and was clinically thought to have an abdominal complication of some kind; but he recovered eventually, so it was never proved. In the

REFERENCES: P.M.N.—Polymorpho-nuclear Neutrophile; L.—Lymphocyte; E.—Eosinophile.
Normal number of leucocytes per c.mm. is 7,000 to 10,000.

No.	Age.	Sex.	Red Cells.	White Cells.	Remarks.
1	36	M.	4,880,000	3,300 P.M.N., 80 per cent. L., 20 "	
2	12	M.	5,550,000	10,400 P.M.N., 57 per cent. L., 41 " E., 2 "	Mild attack. 11th day of illness.
3	31	F.	—	6,000	History of onset indefinite.
4	—	M.	—	5,700	Ill one week (?)
5A	—	F.	—	8,000	Ill six days.
5B	—	—	—	4,600	25 days later. Died same day. P.M., uncomplicated enteric.
6	33	F.	—	8,200	Ill about 2½ weeks. Temperature was nearly normal, but 3 or 4 days ago started to rise. Is now 104 deg. Left leg swollen (thrombosis?).
7A	35	F.	—	8,600	Moderate attack.
7B	—	—	—	8,800	4 days later. P.M. showed lobar pneumonia (grey hepatisation) as well as typhoid.
8	—	M.	—	3,300	Very bad.
9	—	M.	—	10,000	Ill 3 weeks. A very moderate attack.
10	—	M.	—	4,000 P.M.N., 62 per cent. L., 38 "	Bad attack. Died 12 days later.
11A	—	M.	—	3,700	Ailing 5 to 6 weeks; acutely ill, 7 days.
11B	—	—	—	7,300	5 days later: Very bad. Has hypostatic congestion of the lungs. Died same day.
12	26	M.	—	5,100	Ill 23 days. Gave Vidal on the 9th and on the 22nd day.
13	7	F.	—	9,300	Ill 14 days. Died.
14	—	M.	—	3,700 P.M.N., 74 per cent. L., 26 "	In 4th week. Rather severe attack.
15	—	F.	—	8,800	Moderately severe attack.
16	—	F.	—	8,400	Moderate attack.
17	33	M.	—	4,000 P.M.N., 65 per cent. L., 35 "	Ill 2 weeks. Died a few days later.
18	34	F.	—	15,500	Ailing a week or more before admission. Temperature up for several days only while in hospital. No complications found.
19A	30	F.	—	25,500	Pneumonia and syphilis in addition.
19B	—	—	—	13,300	17 days later.
20	20	M.	—	8,600	Ill 11 days. Mild attack.
21A	7	M.	—	10,400	Ill 3 weeks. Temperature high.
21B	—	—	—	10,400	13 days later. Temperature still above normal.
22	15	F.	—	8,000	Ill 14 days.
23	28	M.	—	4,000	Ill 15 days. Had general septic peritonitis of 24 hours' duration, due to a perforated typhoid ulcer. Died.
24	18	F.	—	15,700	Has a well-marked secondary syphilitic rash; present 2 weeks.
25A	19	M.	—	6,000	Ill 2 weeks. Very bad. Blood contained a pure culture of the typhoid bacillus.
25B	—	—	—	10,000	3 days later. Has a blotchy red rash over face and body (due to measles or quinine?).
26	55	M.	—	4,200	Ill 3½ weeks.
27	38	M.	5,333,000	8,400 P.M.N., 52 per cent. L., 44 " E., 4 "	
28A	—	F.	—	4,800	Ill 6 weeks. Has had hæmorrhage during the last 24 hours.
28B	—	—	—	4,200	16 days later.
27A	12	M.	—	6,200	Ill 3 days.
29B	—	—	—	3,500 P.M.N., 64 per cent. L., 36 "	Ill 22 days; semi-conscious. Eventually recovered.
30	—	M.	—	8,000	Ill 9 days.
31A	30	M.	—	8,400	Ill 10 days.
31B	—	—	—	8,200	24 days later. Mild attack. Temperature never rose above 101 deg.

No.	Age.	Sex.	Red Cells.	White Cells.	Remarks.
32	15	M.	—	11,300	Very bad. Delirious. Died 7 days later. Blood contained a pure culture of typhoid bacilli. Had an ulcer on the groin of some duration. P.M. disclosed double broncho pneumonia and double otitis media.
33	30	F.	—	6,400	Ill several weeks.
34	9	F.	—	4,400	Ill 8 days.
35	2½	M.	—	15,700	Ill 12 days. Moderate attack. In the incubation stage of whooping-cough.
36A	35	M.	—	8,200	Had enteric several weeks ago, this being a relapse.
36B			—	8,000	18 days later. Very severe attack.
37A	37	M.	—	7,700	Ill 11 days.
37B			—	6,000	8 days later.
38A	23	M.	—	7,700	Ill 22 days.
38B			—	4,400	14 days later. Temperature still high.
39A	22	M.	—	2,800	Ill 2 weeks.
39B			—	10,000	7 days later. Symptoms of perforation a few hours previous to taking the blood. Died 3½ hours after. P.M. revealed perforation of a typhoid ulcer, with purulent peritonitis.
				P.M.N., 75 per cent. L., 25 "	
40	38	M.	—	1,700	Ill 6 weeks.
41	23	M.	—	4,200	Ill 14 days.
42	25	M.	—	27,100	Fell down a ship's hold a few hours ago. Is now moribund. P.M. revealed early typhoid lesions, and in addition fracture of the base of the skull, with much laceration of the brain.
43A	22	M.	—	4,000	Ill 6 days.
43B			—	6,600	23 days later.
44A	24	M.	—	8,400	Ill 15 days.
44B			—	5,500	7 days later. Several pints of hæmorrhage the last few days; none the last 24 hours.
45A	23	F.	—	8,200	
45B			—	9,500	3 days later.
46	6	M.	—	11,300	Very bad attack. Much abdominal distension. Recovered.
47	45	F.	—	6,600	Ill 4 weeks.
48A	21	M.	—	3,300	Ill 6 days.
48B			—	4,800	10 days later.
49	31	M.	—	6,200	Ill 12 days.
50	15	F.	—	4,200	Ill 15 days. Very bad.
51	31	M.	—	7,100	Ill 35 weeks. Very bad.
52	12	F.	—	6,200	Ill 13 weeks. Very bad.
53	9	M.	—	7,100	Ill 19 days. Very bad.
54	17	F.	—	4,400	Duration doubtful.
55	11	M.	—	3,500	Ill 3 weeks. Very bad.
56	22	M.	—	1,300	Ill 2 weeks. Died several days later.
				P.M.N., 69 per cent. L., 31 "	
57	25	M.	4,600,000	5,700	About 12 hours after 30 oz. of hæmorrhage. Died a few days later.
				P.M.N., 81 per cent. L., 19 "	
58	10	M.	4,888,000	16,400	14th day of illness; doubtful positive Widal; only a mild attack.
				P.M.N., 25 per cent. L., 74 " E., 1 "	
59	30	F.	—	2,800	Ill 8 days. Very bad. Recovered.
60	23	M.	—	7,300	Ill 3 weeks. Very bad. Died several days later.
				P.M.N., 69 per cent. L., 31 "	
61	19	M.	—	7,100	Ill 7 days. Mild attack.
				P.M.N., 52 per cent. L., 48 "	
62	38	M.	5,133,000	6,800	Ill 22 days. Moderate attack. Had a relapse subsequently.
				P.M.N., 72 per cent. L., 28 "	
63	20	F.	—	6,200	Ill 11 days. Moderate attack. Recovered.
64	20	F.	4,755,000	6,000	12th day of illness. Mild attack. Recovered.
				P.M.N., 57.5 per cent. L., 41 " E., 1.5 "	

second it was not at all sure that the disease was enteric. The lowest count recorded is one of 1700, the patient having been ill for six weeks, and rather bad.

Diagnostic Value.—Typhoid resembles in its leucocyte count *measles, influenza, constipation, malaria, pleurisy with effusion* (many cases), some cases of *malignant endocarditis, tuberculosis* (local or miliary, if uncomplicated by any suppurative focus), *catarrhal appendicitis*, some cases of *subacute rheumatism*, and some fatal cases of *peritonitis* (in these, curiously, there is sometimes, but rarely, no leucocytosis). In all these diseases, however, we get a negative Widal reaction. In *malaria*, also, the parasite would be found. With slight help, then, from the clinical signs, typhoid may in most cases be distinguished from the above diseases. But from a great many other diseases which resemble it clinically, typhoid may be distinguished by the blood count alone (allowing for leucocytosis in the case of some complications). It has this advantage over the Widal reaction in that the latter is of no value in the first week, whereas, if the patient has a temperature, feeling of malaise, etc., and one can exclude two or three diseases, a normal, or diminished, leucocyte count will nearly always indicate typhoid.

Some of the diseases which it resembles clinically, but from which it differs hæmatologically, are plague, pneumonia, appendicitis, meningitis (except most cases of tubercular meningitis), suppuration in any part of the body, septic endometritis, infective periostitis, empyema, acute rheumatism (so many of these cases, especially in children, are partly masked, the joints not being affected), smallpox, scarlet fever, tonsillitis and tuberculosis complicated with pyogenic organisms (*e.g.*, a cavity in the lung containing pus). Some acute cases of lymphadenoma resemble typhoid both clinically and in their white cell count; they may be distinguished, however, by a marked diminution in hæmoglobin and in red cells.

The cases are given in detail in the preceding table.

Professor Koch still stoutly maintains that there is no proper evidence of the transmission of the tuberculosis of cattle to man through the milk or meat derived from tubercular beasts. His main argument is that if a human being contracted tuberculosis from meat or milk, it would make its appearance first in the intestines, whereas last year's reports of all tuberculous cases studied at the German hospitals and laboratories show not a single undoubted case where the disease originated in the digestive tract. He points out that a really genuine attempt to prevent the consumption of tubercular meat and milk would send up the price of these articles of diet so much as to harm the health of the community.

SOME SEQUELÆ OF SYPHILITIC INFECTION.

By R. Humphrey Marten, M.B., B.C. (Cantab),
M.R.C.S., L.R.C.P. (Lond.), Adelaide.

WHEN a man presents himself with a penile abrasion, which in due course develops into an indurated chancre, it is impossible for any of us, even if we should profess to be specialists in venereal diseases, to picture in our mind's eye what may be expected to happen to the patient from so simple a looking sore in the next 10, 20 or 30 years of his life—that is, if the unfortunate individual manages to live so long and escape the many pitfalls we know are before him.

Probably, in Australia, we, as general practitioners, have a better opportunity of following up our cases of syphilis than in the older countries, where, as Mott¹ says in the "Archives of Neurology," that in England "if a man be infected he attends the Lock Hospital; after a certain time (perhaps in the secondary stage of the disease) he gets a squint and turns up at an Eye Hospital, or if he has paralysed he attends a General Hospital or one for nervous diseases, or he may become incapacitated mentally and physically or be transferred to the Workhouse Infirmary, and possibly afterwards to an asylum." Knowing the history of about 50 syphilitics, I thought it might be of interest to this Society to bring before it some of the facts that have come under my notice. In the first place, I do not believe that persons who have been infected with syphilis live to a great age—I should say that 60 is their widest limit. Eleven have died, out of the 50, so far; they were all under 55, except two medical men, who contracted finger chancres late in life, and one man who died at 61 some years after acquiring a penile Hunterian chancre. Moxon² found that in 56 persons dying of visceral syphilis the average age was 37. I examined 102 males, whose ages ranged from 60 to 96, to see if they showed any signs of old syphilis; in only one was there a scar on the penis, five had marks of inguinal buboes, none had any evidences of tertiary syphilis about their bodies. Runeberg,³ in an address before the third Congress of Northern Life Assurance Societies, put 15 per cent. of all deaths down to syphilis; and Parkes Weber⁴ found that out of 500 cases of death reported by the North British and Mercantile Insurance Company, 18 were entirely due to the infection of syphilis, although only three had admitted that they had suffered from venereal disease. The average age at which these people died was 47. From the foregoing facts I feel strongly inclined to deduce the theory that persons who are infected with syphilis die at a comparatively early age, and

I have been unable to find any data in medical literature which would enable us to fix the age with any greater degree of accuracy.

The next point I wish to draw attention to is that so many marriages in which one or other of the parents have had syphilis are either sterile or the number of children born are very few. This is probably an extremely good thing for the community at large, and it is a pity that the same provision of Nature does not apply to persons suffering from tuberculosis, where, in fact, the reverse appears to be the rule and small families the exception. This sterility in syphilis is not brought about by destruction of the testicles—by sarcoceles, for instance—for the only one of my patients who has suffered in this way has managed to beget one apparently healthy child in ten years, although the man himself has never been free for many years from tertiary ulceration on the soles of his feet.

The syphilitic poison must in some way destroy in the case of a male the power of the sperm cells to fecundate and in the case of a female the power of the ovum to germinate. Twenty-nine of the patients whom I have known to have had syphilis have married, and in 15, or rather more than 50 per cent., the unions have been absolutely sterile, impregnation never having occurred. In four others there has been only one child as the result of the marriage; two have had large families, the remainder have all had small families, not more than three or four at the most. The only country which gives the averages of sterile marriages is France,⁵ where I find 20 per cent. of such unions are sterile, whereas amongst the 29 cases I quoted over 50 per cent. were sterile, and that appears to me to strengthen my argument that in the cases of persons afflicted with syphilis the chances are against procreation. This, of course, may be merely a coincidence, although I can find no figures bearing on the point.

This leads up to the need of always examining the husbands before subjecting the wives to treatment for sterility. In two cases the unfortunate women have been subjected to dilatation of the cervix when all the time the husband was probably at fault. There is an idea in the profession and amongst the laity that long courses of treatment by iodide of potash produces sterility in the male. I am inclined to think that it is the syphilis, and not the drug, for in a case where a patient took the enormous dose of 330 grains of iodide of potash daily for actinomycosis of the thigh, which I reported before this Society in 1897 it was noted "that although he had been married for some years his wife never became

pregnant except during this time, and the result is a fine healthy child," and it was also noted that the patient had never had any venereal disease.

Another point is the influence of disease in the parent in affording protection, partial or complete, to the offspring. Hutchinson⁶ says: "We have very little clinical evidence on which to build, but what we do possess certainly favours the view that those who have suffered in infancy from inherited disease are to some extent protected." In two of my cases the parent has well-developed evidences of tertiary syphilis, and the son of one has had well-marked congenital symptoms, such as interstitial keratitis, Hutchinson's teeth and loss of the septum nasi, but without any protection for himself, as I have treated him for a mild attack of syphilis as evidenced by a hard chancre, sore throat and rash. He married and his wife had a stillborn child at about six months, another at full term which died of well marked congenital syphilis when 11 months old. The wife died after her second confinement from pulmonary embolism. The daughter of the other patient married a man and had one apparently healthy child; her husband then gave her syphilis, and she went through an ordinary attack, but has been sterile since; and one of her brothers has suffered from what Fournier⁷ terms a parasymphilitic affection, that is, a partial dystrophy of the nervous system. Two children whose parents have had syphilis have been under observation for cyclical albuminuria without any other manifestations of congenital taint, and I have wondered whether this may not be one of the causes of this obscure condition. I have only seen one case of what Hutchinson terms the "after marriage chancre," that is, a sore occurring in connection with syphilis immediately after marriage on the penis of a man who has formerly had syphilis, and my case bears out what Hutchinson teaches, that these persons still have an active virus in their blood, in spite of treatment by mercury, as at the time this patient had a specific sore on his leg, and married absolutely against my advice.

With regard to lesions of the nervous system, some of my cases confirm what Mott⁸ contends—that paralysis may occur quite early in the secondary stage. I was recently attending a single girl for occipital headache with paralysis of the right external rectus muscle of the eye, and had no idea that she was syphilised until she developed a rosealous syphilide on her skin and perionychia of several of her finger-nails. She then admitted that she had recently had a vulval chancre, and when well under the influence of mercury her symptoms disappeared.

Another young man, aged 21, during the first year of his syphilis, after a few days premonitory headaches, suddenly became aphasic with right-sided hemiplegia. This must have been due to syphilitic endarteritis without thrombosis, as he got rapidly well under appropriate treatment, although his brain has never allowed him to do the abstruse calculations he was accustomed to perform before; in consequence he has had to leave a very lucrative appointment. A similar case occurred to a fellow-student of mine, a man well over 30, who was then a "chronic" of so long a standing that the date of his entry at the hospital was lost in oblivion. We were sitting in the student's room when the poor fellow suddenly became aphasic with right-sided hemiplegia, but without loss of consciousness. Sir Thomas Barlow (then, of course, Dr. Barlow) happened to be in the hospital and came in to see him, and having listened to his heart said, as he left the room, "Rub his belly with blue butter." That was the shortest and yet one of the most impressive clinical lectures I remember ever to have heard. Dr. Barlow discovered for himself that the heart was all right, therefore the condition was most likely not to be embolic, and the only other cause of hemiplegia in a man under 45 is syphilitic endarteritis. I am unable to tell you the after history of the case, as he never turned up at the hospital again whilst I was there, and his name does not appear in the "Medical Directory," so I presume he is still a chronic medical student if alive.

The longest case I have had under observation contracted syphilis some 24 years ago, and came with nodes on his skull to a practitioner to whom I was articled in England. I remember that the patient, the practitioner, and myself were rather amused than otherwise with the condition. Fortunately I have been able to watch this case since, and follow the steady, but never sure, down-hill course. Iodide of potassium was prescribed for the nodes, and they soon passed away. Some ten years after the nodal outbreak the patient passed from apparently robust health into a peculiar anæmic condition, which gave him an ashy-grey colour, attended by marked loss of flesh. During this peculiar anæmic condition, ophthalmoplegia externa suddenly appeared. This was rapidly followed by tabetic symptoms, which have gradually progressed since, and left the patient a complete bodily wreck, but mentally absolutely free.

Four patients, including the above, have developed tabes dorsalis, one of whom has already died. Four have developed and rapidly

died from general paralysis of the insane. Both these sets of cases point strongly to what Mott is trying to insist upon in the "Archives of Neurology," i.e., that syphilis is probably the *fons et origo* of these two diseases.

One patient has had a gumma pressing on the spinal cord, and although the paraplegia has to a great extent passed away, it has left a spastic condition behind which has not been at all helped by excesses in Baccho. One patient had syphilitic meningitis of the cerebral cortex, which rapidly recovered under liquor hydrarg. perchlor. and iodide of potassium.

With regard to the alimentary system, three patients have had sclerosis of the mucous membrane of the tongue, one of which has already passed on into an epithelioma, for which I have removed half his tongue and all the glands on either side of the neck. Two have gummata in the tongue, but both have quite cleared up under iodide of potash. One suffers from abdominal pain in the left hypochondriac region, which is only relieved by large doses of iodide of potash. One has lost his septum nasi; three in acquired syphilis have had circular perforations of the septum, a condition which I believe to be pathognomonic of syphilis, and requiring large and immediate doses of iodide of potash to save the septum and dropping of the nose. One case of congenital syphilis presented one of these perforations, which ceased at once with appropriate treatment.

With regard to complication of syphilis with other diseases, I have seen two cases of Bright's disease and secondary syphilis; one died, the other recovered. I have seen one case complicating typhoid fever, which, I believe, eventually recovered.

Three have died of tuberculosis, one (a man who contracted syphilis when over 50, and died of phthisis) with a large liver and a general arterial degeneration. One lady who had a quiescent phthisis for several years died some six months after syphilisation from rapid exacerbation of her lung troubles, and one woman who had been dilated for sterility died at the age of 40 from acute tuberculosis complicated by syphilitic caries of the skull and nodes on the tibiae.

I have known four of our own profession who have become inoculated on their fingers; one died about 18 months afterwards from what was proved post-mortem to be cancer of the liver; another died a few years afterwards from what was probably a carcinoma, although the symptoms did not exactly tally with that condition, and no post-mortem was obtained. Another man, well known in the profession, lost all the nails off the fingers of his two hands

during his secondary stage, but is still alive some ten years after infection, and well over 70 years of age. One point that has struck me is how long will the syphilitic virus remain in a woman? I have attended a woman for the last 12 years who has shown no symptoms of syphilis now for 10 years, and yet not a year goes by in which she does not send me one of her victims for well-marked syphilis; and after careful inquiries I have been unable to put the infection down to any other source, but the life the female leads always leaves a loophole of doubt. I have only seen one case of urethral chancre which was attended by bullet glands in the groin, rash and sore throat, but, like so many of these patients, he has disappeared from view. A lieutenant in the English army came down from India and put a steamer into quarantine, as he had developed a shotty and vesicular rash, which the late Dr. Whittell, who was an expert on smallpox, had much difficulty in diagnosing as syphilis, as no chancre could be found, but the rash soon disappeared under proper treatment.

In conclusion, I would like to say that for several years I have had an idea that syphilis contracted from the same sources runs the same course and kills in the same way the victims infected, and there are cases which point to this conclusion, and Gilles de la Tourette has recorded a series of nervous cases following infection from the same source; but it will be understood how difficult it is to prove this theory, as it would be necessary to keep in touch with cases for many years after infection, and to keep accurate records as to when and where they were infected. I may be able later on to give further histories of the men infected by the woman I mentioned previously, but young fellows are difficult to keep in touch with for a sufficiently long term.

The most difficult patients to treat and convince that I have come across are those people who suffer from syphilophobia. I have had two or three under my care. One has been attending for years past; one has become insane, and is at present, I believe, in the Parkside Asylum. You may convince them for a few weeks, but they turn up as bad as ever now and again.

REFERENCES.—¹"Archives of Neurology"; ²Pollock, Life Insurance; ³Lancet, September 27th, 1902; ⁴Lancet, September 27th, 1902; ⁵Vital Statistics, Newsholme; ⁶Allbutt, "System of Medicine," vol. II.; ⁷quoted by Mott in the "Archives of Neurology"; ⁸"Archives of Neurology"; ⁹quoted by Mott, "Archives of Neurology."

(Read before the South Australian Branch of the British Medical Association.)

One of the two men who were suffering from smallpox when the French mail steamer "Ville de la Ciotat" arrived in Sydney, an Arab, a stoker on the vessel, died on December 15th. The other man, also an Arab, is progressing satisfactorily.

A SERIES OF NINE CASES OF HYSTERECTOMY.

By J. L. Beeston, L.K.Q.C.P., L.R.C.S. (Irel.),
Newcastle (N.S.W.).

I THOUGHT it would be interesting to give a brief account of those cases of hysterectomy I have done for various causes during the past eight years in Newcastle. There is no doubt that with increasing experience in these cases one improves greatly in technique and the rapidity of performance. The first case of vaginal hysterectomy that I did, I thought the most difficult one could perform; undoubtedly, there were difficulties, but as time went on, and one became more accustomed to the touch of the various structures, the difficulties grew less and were more easily overcome. I will now give the cases as they occurred, eliminating all extraneous matter as much as possible.

Mrs. J., aged 40.—I first saw her about May, 1894. She was then very pale and emaciated. Her abdomen was about as large as one would expect at the seventh month of pregnancy. She has suffered for the last 18 months from menorrhagia and metrorrhagia; pain very severe at times in the lower part of the abdomen; legs swollen, evidently from pressure. She had hæmic murmurs over the pulmonary valves. The urine was normal.

I admitted her with the intention of removing the ovaries after Tait's method and leaving the tumour, but on opening the abdomen the tumour came so easily out of the wound that I determined to remove it. The ovaries on each side were adherent, and each side of the tumour was covered with enlarged and tortuous vessels. These were ligatured in series and then divided. The pins of Kœberles serre-nœud were then passed as low down as possible through the base of the tumour; the wire of the ecraseur was then put round and under the pins and tightened. I then made two flaps of peritoneum and cut away the tumour in a V shape at the stump. The flaps were then stitched with a continuous suture and the ecraseur tightened still more. The abdomen was closed in the usual way with silk worm gut. Underneath the pins gauze was placed and the stump covered with iodoform. There was a good deal of shock, which was combated with hypodermic injections of strychnine.

The wire of the ecraseur was tightened daily, and at the end of a fortnight the necrosed end of the stump separated, and in a fortnight more she was discharged.

Mrs. A.—Has had eight children. Catamenia ceased at 42. Twelve months ago she commenced to have a discharge of blood from the

vagina, latterly being very offensive. She was very pale and emaciated, but not cachectic looking.

P.V. examination revealed a fungoid mass in the cervix, which bled freely on being touched. The uterus was not fixed, nor were there any glands to be felt in the pelvis.

She was admitted to hospital, and operated upon on December 12th, 1895.

I first plugged the cavity of the uterus with iodoform gauze, then seized the cervix above the growth with a strong vulsellum; then with a long pair of scissors curved on the flat I cut into Douglass' pouch, and then round to the anterior fornix, keeping a sound in the bladder as a guide. The fingers were then pushed well over the uterus to separate the bladder, and when all seemed free I retroverted the uterus by placing the right hand over the pubes and the left grasping the fundus. This brought the broad ligaments into view; these were ligatured in two places with silk, and cut on the right side. The uterus was then pulled well over, and the same procedure carried out on the left side. With a few more snips of the scissors the uterus came away.

I did not see the intestines during the operation. An indiarubber tube was placed in the posterior cul-de-sac, and the vagina lightly packed with gauze.

It was surprising the slight amount of shock following the operation. The next morning she said she could easily get up and go about. The tube was removed on the fourth day, and beyond douching there was little done in the way of dressing. She lived for two years afterwards, but died from a recurrence of the disease in the pelvis.

Mrs. J.—Has had four children. For the last two years she has menstruated regularly, but of late the amount has been excessive. She looks pale and anæmic. P.V.: On the right side of the cervix, extending to the vaginal vault, there is a growth which bleeds freely on being touched. The uterus is freely movable.

Operated upon on March 26th, 1896. Vaginal hysterectomy was performed in a manner somewhat similar to the last, with the difference that the uterus came away more easily. However, after ligaturing the vessels on both sides and removing the uterus, a very sharp gush of hæmorrhage occurred, which I found was due to ligatures slipping on both sides. The sides were held apart by retractors until I caught the bleeding points with long Spencer Wells' forceps; these I left on after the manner of Greig Smith's clamps. The vagina was packed with gauze. This case naturally gave me a good deal of anxiety, especially when I came

to remove the forceps, which I did on the fourth day. However, beyond a great deal of shock from the loss of blood there was nothing important to report. She was discharged in a month, and lived 18 months, dying from a recurrence of the disease.

Mrs. J., aged 28.—Has been married six years, but has had no children. Has always had profuse and painful menstruation and has occasional attacks of retention of urine. P.V.: The pelvic cavity is filled with a hard nodular mass continuous with the cervix. On January 18th, 1897, I opened the abdomen, and with a little manipulation extracted the tumour from the abdominal cavity. The ovaries and tubes were high up on the tumour, and the vessels were tortuous, but not very large; they were ligatured separately and cut. The *serre-nœud* was then applied and the tumour cut away, the abdominal wound was closed and the pin packed round with gauze. The *ecraseur* came away with the necrosed stump in three weeks. Recovery was uninterrupted.

Mrs. S., aged 54.—Has had 10 children. Menstruation ceased at 46. Six months ago noticed hæmorrhage after exertion; since then it has been intermittent. P.V.: There is a small nodule about the size of a walnut on the cervix, bleeding on pressure; there is also a patch of thickening at the junction of the vaginal vault and the cervix on the same side. Vaginal hysterectomy performed on March 18th, 1897. In this case I first curetted the mass away and then curetted the uterus, afterwards applying iodised phenol to the interior. Catgut was used for the ligatures. The capacious size of the vagina made the operation a comparatively easy one. She was discharged in a month, and when I last heard of her was in good health.

Mrs. D., aged 32.—No children. Has always had profuse menstruation, but more so latterly. P.V.: A nodular mass can be felt in the posterior cul-de-sac, extending into the right iliac fossa and continuous with the cervix. Operated upon March 20th, 1897. Incision made in median line, but great difficulty was experienced in extracting the tumour owing to the adhesions posteriorly. These were broken down by the finger, and then the delivery of the mass was accomplished. I now found that there was a comparatively small pedicle, so determined to do the intra-peritoneal operation. The vessels were secured on either side, the bladder was peeled off the anterior surface of the tumour, two flaps were then cut and all vessels tied with catgut. All hæmorrhage having ceased, the stump of the cervix was stitched with deep chromicised gut and the peritoneal flaps with a continuous suture.

The shock was very profound. Saline injection and strychnine hypodermically were used, but she died 36 hours after the operation.

P.M. showed that there had been considerable oozing from the stump, but no peritonitis.

Mrs. L., aged 38, three children.—Menstruation very profuse for last 18 months, with great pain in right iliac fossa, so much so that she cannot get about her work. P.V.: A large mass can be felt in right side of pelvis; fundus about three inches above pubis, and fixed.

Operation, June 18th, 1898. The tumour was easily brought out of the pelvis, where it seemed to be wedged but not adherent. On account of the result of the last case I determined to again use the *serre-neud*. This was applied, as in the first cases, and she recovered without a bad symptom, leaving hospital a month later.

Mrs. D., aged 36, four children.—Menstruation very profuse and painful. P.V.: The whole pelvis is filled with a hard nodular tumour, and fixed firmly.

Operation, June 20th, 1899. Some adhesions posteriorly gave some trouble, but once these were freed, the tumour came well out of the abdominal cavity. This time I decided to again try the intra-peritoneal method. The ovaries were well up on the surface of the tumour, and the sides were covered with enlarged and tortuous vessels. These were ligatured with successive ligatures and divided; I then passed a double ligature through the cervical stump, just above the vagina, and tied it. Two flaps were then made, and the tumour removed. Deep sutures were passed through the stump and continuous through the peritoneal flaps. The abdomen was filled with warm sterile water and left full. The abdominal wound was closed in the usual way. Beyond some slight shock, she recovered without any trouble and left hospital in a month.

I first saw Mrs. K. when she was eight months pregnant with her first child. She was then in very great pain and suffering from obstruction of the bowels. Palpation revealed a pregnant uterus with what appeared to be a transverse presentation, the head apparently being impacted in the right iliac fossa. The pain being referred to this spot gave one the impression that the obstruction was mechanical and due to pressure, though I was unable to rotate the mass. During the next month she had a bad time of it, but with the aid of purgatives and rectal enemata she was enabled to carry on to full term, when I delivered her with forceps under chloroform. I now found that what I had a month since taken to be a head was a fairly large fibroid tumour. There was no trouble during the puerperium. About two months afterwards I examined her and

found the tumour apparently decreased in size, and as it was not giving her any inconvenience she decided to wait. I saw no more of her until the beginning of July last year, when she told me that she was three months pregnant. As she had narrowly escaped with her life during the previous pregnancy, I advised her to have the tumour removed. Accordingly, she was admitted into the Newcastle Hospital and operated upon two days afterwards. On examination there appeared to be a tumour consisting of two different parts, one occupying the right iliac fossa and very hard to the touch; the other, softer in consistence, filling the left inguinal region. P.V.: The os was soft and high up on the left side, the rest of the upper part of the pelvis being filled by a hard mass.

I made the usual median incision and had to extend it about two and a half inches above the umbilicus. A large tumour could be felt attached to the uterus, and the foetus could be detected through the uterine wall. There being no adhesions, I was able to lift the whole tumour out of the abdominal cavity, the abdominal walls being depressed by Dr. Nickson, who was assisting me.

The appendages were now removed on both sides. The sides of the tumour, especially close to the cervix, were covered by enlarged and tortuous vessels; these were picked up with an aneurism needle and tied. Two of the ligatures slipped and gave rise to pretty smart hæmorrhage. After all had apparently been controlled, a double ligature was passed through the cervix and tied. The bladder was now detached and the tumour cut away, after reflecting two flaps from the peritoneal surface. The cervical canal was scraped out with a curette, and swabbed with perchloride of mercury solution (1 to 1000). The flaps were stitched with interrupted sutures of chromicised catgut, and the broad ligaments on either side with a continuous catgut suture. The abdominal cavity was flushed with hot boracic solution, and closed in the usual way. Subsequent shock was not profound, and the pulse kept quiet. The chief trouble afterwards was vomiting, which was checked by washing out the stomach.

There was one little trouble which was unusual—at least, I have not met with it before: On the fifth day the temperature ran up to 103°, and on examining the wound I found a small piece of omentum protruding between the stitches. I ligatured it with catgut and replaced the stump, afterwards putting a couple of stitches through the abdominal wall. With this exception, the recovery was uninterrupted, and she was up on a lounge a month after the operation.

(Read before the New South Wales Branch of the British Medical Association.)

A CASE OF BERI-BERI.

By W. F. Hayward, M.R.C.S. Eng., L.K.Q.C.P. Irel.,
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CASES of disease not indigenous to this State are sufficiently rarely met with as to warrant me bringing the following one under your notice:—

O.A., *et. 57*, single, a native of Norway, second mate and sailmaster on a Norwegian ship, was admitted into the Adelaide Hospital, under my care, on November 15th, complaining of "pain and weakness in the legs."

On October 1st, 1901, he sailed from Norway in a sailing ship for Tamatave, Madagascar, which port was reached during February of the present year. During the voyage his health and that of the crew was good till the Equator was reached; from that time till reaching port he suffered from headache and malaise, as did the crew generally. These symptoms were attributed to the absence of fresh food, and they disappeared when a fresh food supply was obtained at Tamatave. The ship remained in port for six weeks, during which time the patient remained on board ship and did not go "on the spree." During this time he felt quite well, and was in good health when the ship sailed for Singapore. About two weeks later he noticed a difficulty in walking and a heaviness in his legs. The legs were swollen, the swelling commencing in the ankles and afterwards appearing in the popliteal spaces and thighs, being confined to the posterior parts. The skin pitted on pressure. As long as the swelling continued there was hardly any sensation in his legs, but when it went down he experienced some pain and tenderness on pressure. He had no vomiting nor any rigor, but headache and some shivering in the initial stages. He continued his work throughout the attack and was quite well when the ship left Singapore on May 20th. The day after he was seized with headache, shivering and loss of eyesight, but there was no swelling of the limbs. This attack only lasted a few days, and he felt nothing to worry about till two weeks after leaving Mauritius, that is, about the middle of August, when he was taken with a violent headache, vomiting, loss of eyesight, and his legs began to swell. This time the swelling commenced at the popliteal spaces, succeeded by swelling of the ankles, thighs and abdomen in the order named, and about six weeks later the arms were similarly affected, which symptoms, combined with general weakness, continued till his arrival at Port Adelaide on November 2nd.

The crew of the ship consisted of 12 hands. Of these the captain was unaffected. The first mate was laid up for three days between Tamatave and Singapore; his face and legs were swollen; he had another attack between Singapore and Mauritius, and a third between Mauritius and Port Adelaide. The carpenter also had three attacks, and two A.B.'s. more than one attack each. The steward had two attacks, the second when nearing Australia. He was admitted into the ophthalmic ward of the Adelaide Hospital, and has since been transferred to a medical ward. Vomiting and headache were the initial symptoms in each case.

The accommodation on the ship was good. The patient and the steward occupied the same cabin; the other men, with the exception of the mate, were in the forecabin. The food was bad; very little fresh food except for a few days after leaving port, salt meat and biscuits being the usual fare.

The cargo consisted of lumber to Madagascar, ballast to Singapore-Mauritius, sugar from thence. The patient is an intelligent man. On admission he presented a careworn, wasted, and anæmic appearance. There is no specific or alcoholic history, and the only previous illness is malaria, 14 years ago, since when he has had no manifestation of the disease. He can only lie on his back. His temperature is subnormal. There is some slight puffiness at the back of his ankle-joints; he sleeps well, and has no headache; the eyes react normally to light and accommodation; pupils equal; appetite and digestion good; he is unable to stand, walk, or move his legs; he has pain in the back of both legs; pain and tenderness when the muscles are pinched; muscles of both arms and legs are wasted and flabby, particularly those of the legs; those of the trunk apparently unaffected. Grip of hand very poor. No abnormality discerned in testing sensation, but patient complains of a feeling of numbness in the buttocks and lower part of abdomen, and "pins and needles" in legs and arms. Knee-jerks completely absent; no ankle clonus; plantar reflexes much diminished; cremasteric slight, but abdominal and lumbar easily elicited. Lessened excitability to the faradic current all over both lower limbs, especially the left, most marked in the peroneal, tibialis anticus and vastus externus muscles; nearly normal in the arms. Pulse, 65, regular; tension low; artery plainly felt; arterial pulsation is seen in subclavian regions; apex beat somewhat diffused, best felt and heard in fifth interspace just inside nipple line; cardiac dulness not increased; heart sounds clear. Respiratory system normal; tongue clean; abdomen slightly distended, no

fluid; bowels regular; urine pale amber colour, no deposit, neutral, sp. gr. 1015, no albumen, no sugar, passes a fair quantity.

Though my acquaintance with beri-beri is limited to a case I saw in one of my colleague's wards many years ago, I feel justified in bringing the case before you as an example of the disease. There is no question as to the polyneuritis, and this, taken in connection with the anasarca that was evidently present during the early period of the disease, the coincident illness of other members of the crew with similar symptoms, makes the diagnosis fairly obvious. I take it that the bad feeding of the crew prior to the ship reaching Madagascar acted as a predisposing cause, and rendered them susceptible to contracting the disease. I cannot trace the immediate cause of infection. It seems curious, though as far as I know to the contrary it may be a characteristic of the disease that the early manifestations should have been so mild, and that the severe symptoms should not arise till after the lapse of six or seven months. I imagine that owing to lack of treatment and the favouring influences of continuous poor feeding that the disease gradually increased in intensity. In descriptions of this complaint it is said that localised patches of anæsthesia are invariably present. I have made an industrious search for them in this case, but without success. There is no doubt that my patient is in the later stage of the disease, so probably he has recovered from the symptom. The usual dilatation and weakness of the heart is not very manifest. This may be due to the patient having been in bed for over seven weeks. My house physician tells me that after the exertion consequent on his admission into the hospital there was evidence of cardiac weakness, but it had passed off when I first saw him.

Under the influence of a liberal diet and small doses of arsenic, improvement has been most marked; the paralysis of the legs is rapidly disappearing and the patient can move them freely, and even walk a few steps with assistance.

(Read before the South Australian Branch of the British Medical Association.)

Typhoid at Broken-hill.—At a recent meeting of the municipal council attention was called to the fact that in December of 1900 and the present year an abnormally high death rate and a bad water supply had been co-existent conditions. During the past ten days 47 fresh cases of typhoid had been reported, and the total number of deaths from all causes during the same period had been 31. During the whole of December last only 11 cases of typhoid were reported. For the same month of the previous year, when the water in the reservoir was previously so low, 53 cases of fever occurred.

A CASE OF LICHEN SPINULOSUS (DEYERGIE.)

By F. A. Bennet, M.A., M.D., Lecturer on Diseases of the Skin at the University of Sydney.

THE subject of these notes, who was sent to me by Drs. Blackwood and Kelly, of Summer-hill, is a fine young girl of about 14 years of age, strong and healthy, and the daughter of healthy parents. She never had any skin trouble until about three months ago, when during convalescence from influenza, and whilst still in bed, she developed the present eruption.

It started on the left side of the neck, which it gradually and entirely encompassed, and then passed on to the face. After a week or two it attacked the arms, which it traversed from above downwards till it reached the hands, where it stopped short. By-and-bye appearing slightly on the lower part of the waist, and profusely on the buttocks and hips, it passed down the legs to the feet, leaving the feet free, however. It has attained its present condition by the succession of crop upon crop.

The eruption, which is distributed more or less symmetrically over the areas already indicated, is a horny papular one, which strongly imparts the nutmeg grater sensation to a hand passed over it. The papules in certain places crowd together closely, but remain absolutely discrete. There is no tendency to scaling except slightly on the face, which has a seborrhæic appearance. The rash is strongly in evidence under the chin and all round the neck, more especially back and front, and is scattered irregularly, but comparatively slightly, all over the face, including the forehead. On the arms, especially on the upper portion, the lesions run so closely together as to form almost continuous sheets of unbroken eruption, but are distributed more on the outer and extensor aspects than on the flexor. On the thighs and legs, where a similar lesional condition exists, the rash is worse on the outer and back surfaces, the popliteal spaces, however, remaining unaffected.

The lesions are discrete, reddish, conical, pinhead follicular papules, from the centre of the majority of which fine horny spines project. These spines are best seen under the chin and on the neck, especially back and front. On the limbs, as the result of friction of clothes and treatment, they have in a considerable measure disappeared, although there is still plenty evidence of their spiny nature. The epidermic pegs which surmount the papules can be picked off, and leave small depressions behind, whilst the spines, especially under the chin and on the neck, are sufficiently long as to be readily seized between the finger and thumb of the patient, and thus removed; an

in the detachment of both pegs and spines, the mother tells me that her daughter, shows praiseworthy, if rather trying and mistaken, diligence. The scalp is unaffected, so also are the hands and feet, including the palms, soles and nails. There is little or no itching.

Of the etiology of this rare affection little seems to be known, except that it occurs chiefly in children, and in boys oftener than in girls; whilst as to its pathology "there is evidently first congestion of the vessels, followed by slight effusion round the follicle and hyperplasia of the epidermic cells lining it."

Its Name and Position in Classification.—Like all diseases of the skin, it has plenty of names. Nomenclature seems to be the dermatologist's great prerogative. He seldom describes a case without endeavouring to go one better than his neighbour in putting a name upon it. Crocker calls it "Lichen Pilaris," and thus frees it from its association with keratosis pilaris. Devergie, no doubt from its physical features, calls it "Lichen Spinulosus," an excellent name, brevity being here, as elsewhere, regarded as a virtue; whilst Unna, who would evidently write its pathological history across its forehead, calls it "Keratosis Follicularis Spinulosa," an excellent method, no doubt, but a distinctly clumsy name. Most text-books ignore its existence, whilst in others it is rather hopelessly mixed up with other affections, notably keratosis follicularis and pilaris, and lichen ruber acuminatus; but Crocker amongst others assigns to it the full dignity of an independent disease, and gives an excellent account of it. Hence, in my opinion, if they would but leave us Devergie's name and Crocker's description, all else pertaining to this affection might with advantage be relegated to undisturbed and well-earned rest.

It is occasionally found associated with other diseases, and some time ago I exhibited before the British Medical Association here a case where it occurred in the course of an acute lichen planus.

As to diagnosis, there are only two diseases with which this particular case is at all likely to be confused, viz., keratosis pilaris and pityriasis rubra pilaris; but its spines and inflammatory nature would distinguish it from the former, whilst its spines, its free palms and soles, and the lack of any tendency on the part of the lesions to coalesce, would be sufficient to differentiate it from the latter.

The patient is doing well on two hot alkaline baths daily, followed by inunction of oil of cade in olive oil, together with the internal administration of tonics.

(Read before the New South Wales Branch of the British Medical Association.)

TREATMENT OF TROPICAL DYSENTERY.

By Fred. Goldsmith, M.B., Ch.B. (Adel.), Gov. Medical Off., Northern Territory, S.A.

TROPICAL dysentery is the term applied by certain pathologists to that form of the disease met with in the tropics, characterised by the presence in the stools of the *amœba dysenterica*, and liable to be followed after a longer or shorter period by tropical abscess of the liver.

Before entering directly into the treatment of the disease, I wish to emphasise one or two points in the symptoms, which tend to localise the seat of disease and so influence the treatment adopted. Pain or tenderness on pressure is an important factor in localising the lesion; if more pronounced in the right iliac region the cæcum is the part most likely affected; and if in the left iliac region, the sigmoid flexure. With tenderness over the abdomen generally the probability is that the whole of the large intestine is more or less inflamed. The character of the pain, too, is a most useful guide; where colic is pronounced and tenderness is slight the lesion is probably confined to the cæcum and ascending colon; while, when the sigmoid flexure is the seat of disease, tenesmus is the predominant symptom in respect to pain, and in children the latter symptom is frequently exceedingly pronounced. By careful palpation the seat of disease can be fairly accurately mapped out, more especially in thin subjects where the thickened and oedematous bowel can be traced to the extent of the lesion.

The character of the stools also serves us as a guide in locating the seat of disease. Where the sigmoid flexure is attacked they consist of a small quantity (from a drop or two to, perhaps, an ounce) of greenish mucus spotted or streaked with blood; the smell is rather sickly than fæulent, and under the microscope they are seen to consist of epithelial and lymph cells, red blood corpuscles and amœbæ, but few, if any, bacteria. Where the cæcum or the large intestine generally is attacked we get stools with a very offensive fæulent odour and consist of a brownish mixture of fæcal matter, sloughs, slime and blood, and under the microscope we find among the mucus cells and debris that the amœba is less common, while bacterial life is both abundant and active.

In one or two cases where the whole of the large intestine was extensively involved the patient had no marked pain or tenderness, but lay in an apathetic state, almost continuously passing small reddish-brown stools consisting of semi-digested food, blood, mucus and sloughs.

In an epidemic in which I was associated a short time ago the rule appeared to be that

the sigmoid flexure was first attacked, and if untreated the disease rapidly spread backwards throughout the whole of the large intestine.

Treatment.—One of the first principles of treatment in all cases is rest, both to the body and intestinal canal. Rest in bed is essential in all acute cases, with the use of the bedpan for adults. With children it is often advisable to place old cloths under them to catch the stools rather than allow them to use the chamber, which leads to excessive straining and tending to complicate the disease already present with a *prolapseus recti* or an intussusception. These cloths can afterwards be burned. The diet should be left off altogether for a time, or be wholly fluid, and as little as possible; if necessary, milk with water, soda-water, weak cocoa made with milk and water, toast, rice, or barley-water generally suffice until the acute symptoms have passed away, when thin arrow-root, milk puddings, gravy, etc., may be given, and the diet gradually increased as the condition of the bowel improves. There is often a craving for acid drinks during the acute stage, and I see no objection to their drinks being flavoured with the juice of a lemon, or a whole lemon may be cut up, a pint of boiling water be poured over it and a little sugar added; on cooling, this may be strained and given them in small quantities.

In the active treatment of the disease itself it must be remembered, though the patient may be almost continuously on the stool and passing something each time, that which is passed is not fecal matter at all, but merely the product of the highly inflamed bowel. The feces tend to be locked up behind the diseased part and retained there by the muscular spasm of the affected portion of the bowel, the lumen of which is still further diminished by the oedema present in the mucus and sub-mucus coats; so that the patient is really seriously constipated, and any effort to check the disease till this is remedied only tends to aggravate the severity of the disorder. Remembering this, our main objects in treatment are:—

1. To ensure the passage of the feces.
2. To render the diseased bowel as far as possible aseptic, and to destroy the disease-producing germ.

To ensure the passage of the feces it is necessary to render them as liquid as possible, and for this the sulphates of magnesia or soda are very suitable. They not only render the feces more fluid, but probably reduce the oedema of the bowel as well, and further facilitate the passage of the fecal matter. In my own epidemic I usually gave one drachm doses every two hours, combined with a little

tincture of opium, tincture of orange, and chloroform water till the motions became feculent, and then every four hours afterwards for a few days. The tincture of opium lessened the muscular spasm and tenesmus, and the other ingredients were simply carminatives. In cases where malaria or the malarial cachexia was co-existent I usually gave five grains quinine sulphate at night in powder.

Ipecacuanha is highly spoken of in India and Burmah, and probably acts by increasing the flow of bile, rendering the motions more fluid, and probably has a germicidal action as well. In the earlier stages of my epidemic I tried ipecacuanha several times, but in only one instance could the result be said to be satisfactory, and the resultant nausea was so frequently distressing to the patient that in the end I discarded it altogether in favour of the sulphates. On my way to London from Australia I met Captain Longhurst, R.A.M.C., who had had considerable experience in dysentery, both in Burmah and South Africa, and he informed me that though in Burmah he was convinced that the ipecacuanha treatment was the better, since his arrival in South Africa he had found that there the sulphate treatment was more effective. The probability is that there are two types, in one of which ipecacuanha is indicated and in the other sulphate treatment, and in this matter more accurate knowledge of the types is needed. Siniaruba bark infusion I have tried, according to the Shanghai formula for preparation, but in acute cases with no very great success. I think it is more suitable in sub-acute cases where the seat of the disease is the cæcum and ascending colon than where the sigmoid flexure is affected. Bismuth is very useful in the sub-acute or chronic cases where the acute symptoms have passed off, leaving a peculiar irritative state of the intestines. In these cases I gave 15 to 20 grains of the sub-nitrate with 5 grains pulv. ipecac. co. in mucilage of tragacanth and water every 2 or 3 hours with satisfactory results.

To render the diseased bowel aseptic as far as possible, and to destroy the disease-producing germ, injections per rectum are valuable when the disease does not extend backwards beyond the descending colon. In acute cases plain hot water or boracic acid injections give great relief for several hours, but do not appear to cut short the attack to any appreciable extent. Methylene blue, however, is a strong germicide, and harmless to the patient, so I tried large enemata, consisting of methylene blue 9 grs., warm saturated boracic acid solution 2 pints, and got such satisfactory results that for simple sigmoid disease I lately used it as a routine in conjunction with the sulphate treatment, and this treatment in such cases cannot, in

opinion, be improved upon. Where tenesmus was marked I usually preceded the injection by half an hour with a hypodermic of morphia. The enema should be injected slowly, and if there be still any expulsive effort the buttocks (which are raised on a pillow) should be pressed together till the spasm passes. The fluid can then be easily retained for 10 or 15 minutes; it can then be wholly or partially discharged. The relief from these injections was very marked, and two at a 12 hours' interval usually sufficed. The motions generally showed traces of colour for 24 hours, with a marked diminution or complete cessation of amœbæ in the discharges. Usually sufficient methylene blue was absorbed by the bowels to give the urine the distinctive colour. I think that besides cutting short the disease, a thorough disinfection of the bowel as described above would, by destroying the amœba, render the patient less liable to subsequent abscess of the liver. Solutions of permanganate of potash in the same way would have a somewhat similar effect; but my results from the methylene blue were so good that I did not need to try any other. Nitrate of silver injections are beneficial in the sub-acute or chronic stage, but their astringent action makes them contra-indicated for the acute stage of the disease.

Where the bowel is attacked too high up to be reached by injections per rectum, insoluble antiseptics given by the mouth would probably be beneficial. Bismuth, on account of its astringent properties, would not be suitable for the acute stage, but probably small doses of thymol or allied antiseptic would be beneficial, but in this I have had no experience.

Precautionary Measures.—The disease once established in a locality certain precautionary measures should be taken by the healthy. Sir William McGregor, at the Congress of 1901, stated that in his opinion the common house fly is a common agent for the transmission of disease from one person to another; others have made the same remark, and this, too, is my own experience. I found in the epidemic with which I was connected that there was a coincident plague of flies, and where they were thickest, there the disease was most prevalent; and by swarming on the stools and flying thence to the food, and drowning themselves in the milk and other fluids, they most probably disseminated the disease from person to person and from house to house. In cases where several people in a family were attacked in succession (presumably being infected from each other) the interval was from four to nine days, so that it is probably the period the organism requires to reproduce itself in sufficient numbers to cause an attack in a fresh

case. All stools should be carefully disinfected directly they are passed, and buried; all bed-clothes should be dipped in mercuric per-chloride or some other disinfectant solution, and scrupulous personal cleanliness should be observed by the attendants, and disinfection of the hands should be thoroughly carried out by each person before going to a meal from the bedside, and all drinking supply (milk, water, etc.) should be boiled and kept covered till required for use, and food should be also protected from flies.

(Read before the South Australian Branch of the British Medical Association.)

THE CAUSE OF PULMONARY EMPHYSEMA.

By W. F. Litchfield, M.B. (Syd.), Assistant Physician
Hospital for Sick Children, Sydney.

THE chief anatomical features of emphysema of the lungs are:—

1. The barrel-shaped chest, or, as it has been expressed, the chest in the position of permanent inspiration.
2. The distension of the air cells and atrophy of the alveolar walls.
3. A catarrhal state of the bronchial mucosa.

Dr. Samuel Gee (Lumleian lectures, B.M.J., March 25, 1899), after an exhaustive and learned discussion on the nature of pulmonary emphysema, sums up as follows:—"That pulmonary emphysema is chiefly due to forced inspiration, although forced expiration may to some small extent play its part; that distension of the lung, in so far as it is due to inspiration, is secondary to distension of the chest; that the forced inspiration is rendered necessary by a feeling of dyspnoea; that the dyspnoea which occurs at the beginning of pulmonary emphysema, and which determines it, is consequent upon obstruction of the air passages; that in chronic progressive emphysema this obstruction depends upon bronchitis, either humid, and attended with free secretion, or dry with scanty secretion; that when once emphysema is set up the dyspnoea and the necessity for forced inspiration are increased by the natural defect of expiratory power in the lungs and in certain parts of the chest, Nature having provided means insufficient for reducing excessive inspiratory distension to the normal, and thus emptying the lungs of residual air; that the degeneration and atrophy of lung tissue are usually dependent upon preceding over-distension, although it is possible that pulmonary atrophy may to some extent

be primary." In the following I wish to show that given the obstruction in the air passages, the whole of the phenomena of emphysema can be accounted for in a somewhat simple manner. In Foster's Physiology will be found this: "If the lungs are repeatedly inflated without any means being taken to draw out the air after each inflation, a procedure which we may speak of as positive ventilation, the result is that the inspiratory efforts are diminished, and if the ventilation is continued may cease altogether. If, on the other hand, air is repeatedly sucked out of the lungs without any corresponding inflations (negative ventilation) the inspiratory efforts are increased, and the increase may be such as to bring the diaphragm to a state of tetanus. That the instrument by which these results are produced is the vagus nerve is shown by the fact that they are no longer distinctly recognisable when both vagus nerves are divided; and that the results are due to the mere mechanical expansion and collapse of the lung in inflation and collapse and not to any chemical influences exerted by the larger amount or smaller amount of air present in the lung in the two cases, increasing or diminishing the absorption of oxygen and escape of carbonic acid, is shown by the fact that the results remain the same when some indifferent gas, such as hydrogen, is used for inflation instead of air or oxygen."

Now, in any case of obstruction in the air passages, such as occurs in bronchitis, there is necessarily induced a "negative ventilation" of the lungs. According to the above the effect of this must be to augment the inspiratory and diminish the expiratory movements. Thus we get the condition of forced inspiration which, according to Gee, is the main factor in the production of pulmonary emphysema accounted for, and we have at the same time an easier explanation of the deficient expiration than the one he gives. According to this view of the production of pulmonary emphysema the process is as follows:—Bronchitis or other obstruction to the airway brings about a "negative ventilation" of the air cells; this, through the vagus, reflexly produces inspiratory dyspnoea. This enlarges the chest, and the lungs distend to fill up the increased space in the thorax. Then in chronic cases the alveolar walls atrophy secondarily to their distension. Ultimately the chest becomes fixed in the position of over-distension, and there is a loss of elasticity in both chest wall and lung tissue.

One may demonstrate some of these features quite simply. If a person holds his nose and breathes with the mouth through a narrow tube such as a pipe-stem, he will notice that in

spite of himself forced inspiration comes on, the whole thorax is lifted, and the upper part of the chest becomes expanded, a resemblance to the emphysematous chest being manifest. It is as well to observe this, that the character of the breathing is different, when the obstruction, as in the above experiment, is high up in the air passages, to that which obtains when it is lower down. In both there is dyspnoea, but in the former the breathing is slow, while in the latter it is rapid. Some time ago (A.M.G., September, 1895) I showed that this had a bearing in diphtheria. In cases of laryngeal obstruction I found that the breathing was much slower when the larynx alone was involved than it was when the membrane had already extended to the smaller tubes.

The relation of the heart to progressive pulmonary emphysema is as follows:—

1. The lung condition may directly embarrass the heart.
2. Chronic bronchitis and arterial degeneration are in some way related, hence cardiac failure and pulmonary emphysema may progress side by side.
3. Cardiac asthenia may actually aid in the production of emphysema by keeping up a congestive state in the lungs.

In conclusion I may make a suggestion as to the treatment of pulmonary emphysema. It is obviously necessary to relieve as far as possible the bronchial obstruction; but, in addition, belladonna might be of service. Belladonna is known to paralyse the nerve endings of the vagus in the lungs, consequently it should have an effect in modifying the reflex inspiratory spasm that produces the disease. I have used belladonna with benefit in the bronchitis of old people, but am not in a position to say whether it really modifies pulmonary emphysema or not.

THE ADVANTAGES OF INOCULATION WITH PROFESSOR HAFKINE'S PLAGUE PROPHYLACTIC.

By R. W. Hornabrook, M.B., M.R.C.S., Adelaide, S.A., late Special Medical Plague Officer Government of Bombay and Health Officer to the Chamber of Mines, Johannesburg.

It is my intention to bring to your notice this evening a subject which is, I hope, of interest to the medical profession of Australia.

During my travels in various parts of the world I have frequently been asked the following question: "Doctor, I am going to a place

infected district. Do you think it wise of me to be inoculated against the plague?" My answer is, "If you are going to a district or town where plague is epidemic; if you intend staying in hotels or knocking about public places, you should certainly be inoculated, but by a medical man who understands fully what he is about." My questioner then very probably informs me that Dr. A. had told him that the risk of catching plague was not worth it; that inoculation is very painful; that a friend of his had an abscess after inoculation, and was very ill. In such a case I am afraid the inoculator could not have been competent to do the work. Inoculation should not seriously disturb the health of the patient. There is absolutely no excuse for the formation of an abscess at the seat of inoculation. The fault lies not with the patient but with the inoculator. He was either not cleanly in his work or was incapable of judging whether the broth was good or not, or he had been careless in using a bottle of which the seal was not perfect.

I speak of this matter because it is the careless, incompetent inoculator that brings inoculation into disrepute with the public. During my plague work I have done over 15,000 inoculations; in one case only did an abscess follow; this was in a woman who immediately after the operation went home and applied a cowdung poultice to her arm. I have never seen a patient seriously ill from inoculation, and in Dharwar we used to inoculate all ages, from infants of one month to old people of 80 years.

Dr. Alice Corthorn, who worked with me in Dharwar, in that town alone did some 14,000 inoculations with only one abscess; since then she has done tens of thousands of inoculations with the same amount of success. The late Captain Leumann, I.M.S., who worked at Hubli, a town a few miles from Dharwar, performed over 30,000 inoculations without any serious results to the health of the inoculated. In an ordinary case the patient can go about his work and feel only slight effects.

The arm becomes painful and red, the swelling in some cases extending as far as the elbow and as high as the shoulder. The temperature rises to 100° or 101°; the patient may vomit, but this is rare; he generally has slight headache, and should feel seedy; the patient should be himself again within three days of the inoculation with a feeling of stiffness in the arm, and tenderness over the seat of inoculation. This, however, soon passes off. In inoculating, the needle should be inserted into the loose areolar tissue of the arm, between the skin and the muscle, and under no circumstances into the muscle itself. I remember on one occasion seeing a patient who had his biceps ruined by

an incompetent operator who had inserted the prophylactic into the muscle, an abscess having followed. If the broth is injected into the loose areolar tissue, should an abscess follow it is very easily opened, and no harm results; but an abscess should not follow.

In dealing with the protection afforded by inoculation I will take the town of Dharwar along with the town of Hubli; this was one of the first places where Haffkine's inoculation was performed on an extensive scale. In this town those persons who had been twice inoculated were allowed to remain in their homes, whereas the uninoculated were obliged to live in segregation camps. It will thus be seen that the inoculated ran the greater risk by remaining in the infected quarter. Yet what do we find. Out of a population of 38,000 at the time of the outbreak of plague in that town in August, 1898, by January 4th, 1899, 17,604 persons had been inoculated—11,457 twice and 6147 once—that is, more than half, for in the first fortnight of the outbreak over 10,000 persons fled from the town. Of those left in the town, among the uninoculated (by far the smaller proportion) there were 1189 plague attacks and 927 deaths, among the once inoculated, 141 attacks and 55 deaths, and among the twice inoculated 41 attacks and 21 deaths. It will thus be seen that even though the twice inoculated ran the greatest risk by remaining in their homes, yet the attacks among them were very few. Again, even if a person is attacked with plague after inoculation his chances of recovery are far greater than if he is not inoculated; the percentage case-mortality in Dharwar being: uninoculated 77 per cent., once inoculated 39 per cent., twice inoculated 51.25 per cent. The reason that the mortality is higher in proportion to attacks among the twice inoculated to the once inoculated is that with the twice inoculated the majority of deaths were due to pneumonic plague, an extremely fatal type of the disease. The attacks, however, among the twice inoculated were in proportion much less than among the once inoculated. Of the 21 deaths recorded among the twice inoculated 16 were due to pneumonic plague.

In the Dharwar Hospital, out of a staff of 32 about half were inoculated and the remainder uninoculated. Of these latter, six contracted plague, four the pneumonic type, and all died; the two bubonic cases recovering. Of the inoculated, not one contracted plague.

Numerous other cases of exemption among the inoculated came under my notice, of which I will mention a few:—

1. S's family. The father was a clerk in the collector's office, Dharwar; had family of 12,

all living in the same house; eight not inoculated all died of plague; four inoculated not attacked.

2. K's family. Father was butler in Dharwar Gymkhana Club; eight in family; five not inoculated; three inoculated; four of the uninoculated died of plague, the only surviving person being a child under one year; the three inoculated not attacked; all lived in the same house.

3. R's family. One child not inoculated died of plague; other three members of family were inoculated, and not attacked.

4. B's family. Five members; four inoculated not attacked; one uninoculated, attacked with plague, and recovered.

5. N's family. Five members; four inoculated not attacked; one uninoculated, attacked with plague, and died.

In all the above instances the families were living together under the same conditions, and the inoculated members were inoculated before the uninoculated were attacked.

The following question has been frequently discussed: Should one run the risk of inoculating a patient with Prof. Haffkine's prophylactic during the incubation period of plague? I agree entirely with Prof. Haffkine, Major Bannermann, the late Captain Leumann, and Dr. Alice Corthorn that you should; even if you inoculate a patient with the plague fever on him, I consider you do him no harm. This is contrary to what one would expect theoretically, for by injecting the toxins of plague into a patient developing plague, one would naturally expect to increase the severity of the attack; this is, however, not the case. I feel competent to speak with some authority on this question. Like many others, I felt that if I inoculated a person already incubating for plague I should do harm, maybe bring about the death of that patient. With this object in view I watched all inoculated plague cases very carefully, took full particulars of the date of inoculation, date of attack with plague, result as to recovery or death, with the gratifying result that I found my theories quite incorrect. I started to prove one thing and found another. Not only is the danger to the patient not increased by inoculating in the incubating stage of plague, but if the inoculation is done 24 hours before the onset of the fever the chances of recovery for the patient are increased.

I will take the figures as supplied by me to the Indian Plague Commission and appearing in their report:—Of 208 cases of plague occurring in inoculated persons, and all of

which came under my observation, 41 were in persons who had been twice inoculated, 142 were in persons who had been once inoculated, and in the other 25 cases full details were not obtainable. Of these 142 cases occurring among the once inoculated, we have 11 persons actually inoculated with the fever on them. Of these, seven died, a mortality of 63·63 per cent.; of nine cases that developed plague within 24 hours of inoculation, four died, or a mortality of 44·44 per cent.; of eight cases that developed within 48 hours, three died, or a mortality of 37·5 per cent.; of seven cases that developed plague on the third day, five died, or a mortality of 71·43 per cent.; of eight cases on the fourth day, none died; of six cases on the fifth day, none died; of 93 cases that developed plague after the fifth day, 30 died, or a mortality of 32·26 per cent.; of the 49 cases that occurred on or before the fifth day after the inoculation, the mortality is only 38·77 per cent. That is, if we take the incubation period of plague as from two to five days, we find that, though 49 people were actually inoculated during that period, the mortality was much below the normal, and even in the case of those 11 actually inoculated suffering from plague at the time, the mortality is not increased, being 63·63 per cent., as against an average mortality among the uninoculated of 77 per cent. We must remember that we are dealing with Asiatics, in whom the mortality from plague is some 20 to 30 per cent. higher than among Europeans.

What do the above figures teach us? This: that even if you do inoculate a person suffering from plague with Prof. Haffkine's prophylactic you do no harm, and if they are in the incubating stage you do considerable good. Practically it means that if a case of plague arises in a household, *all* the members of that household should be inoculated, even if you think some may be, and possibly are, incubating for plague. Fireside theories are very interesting, but how often overturned by practical work. According to theory, inoculating a patient incubating for plague with a dose of dead plague bacilli (for that is what Prof. Haffkine's prophylactic is) should increase the patient's danger; practical work, however, proves our theory incorrect.

All persons attending on plague cases or liable to come in contact with plague in any form, whether it be from the handling of plague-infected rats, or infected clothing, etc., or cleaning infected districts, should be inoculated with Haffkine's prophylactic. This inoculation should be done by a medical man accustomed to the work, who understands when the broth is good or bad, who is perfect!

cleanly in his method, who, if there is the slightest doubt in his mind as to the purity of a bottle should reject it. A bottle in which the seal has the slightest crack in it ought not to be used; the contents may be, and possibly are, good, but it is these little carelessnesses that bring inoculation into disrepute among the laity.

I am strongly in favour of double inoculation. By this I mean inoculation with two full doses of the prophylactic at the interval of a week or ten days, especially in the case of those persons who are subject to grave risk of infection, such as attendants on the sick, those working in infected areas, etc. Double inoculation renders the risk of infection considerably less.

I have often been asked, How long is inoculation good for? What is the period of immunity? This is difficult to answer. In my own opinion certainly six months, and very possibly a year. In the late Captain Leumann's report, in speaking of Hubli, he says: "These inoculations have been effectual for nearly a year, and will in all probability last for a very much longer period." With Dharwar I find that the wholesale scale in which inoculations were done prevented any serious outbreak for over a year in the town, even though the plague was rampant in the surrounding villages.

Another question often put is, For how long can the prophylactic fluid be kept and still remain useful? My answer is the fresher it is the better, but that it may be kept for 12 months, and possibly longer. In February, 1898, I took 10,000 doses from the Indian Government to the Chamber of Mines, Johannesburg. This was stored, and on war breaking out had to be left in Johannesburg. On my return to Johannesburg in December, 1901, I opened one of these cases and inoculated my left arm with a full dose of the prophylactic that had been kept for three years. I obtained a typical reaction.

The Government of the Punjab intend to adopt a wholesale inoculation this winter as a preventative measure against the spread of plague. The plague always shows an increased virulence in India during the cold weather. This is largely due to the native custom of crowding together in their infected homes during the winter, whereas in the summer the native sleeps largely in the open air.

I trust these few notes will be of service to the profession in Australia. Little is known of Prof. Haffkine's work in these States, and among many it appears to have not been fully appreciated. I do not advocate inoculation as a sole method of stamping out the plague—

far from it: cleanliness and sanitation, fresh air and sunlight will do more,—but what I do feel is that inoculation by Prof. Haffkine's prophylactic is essential to all those liable to run any risk of infection.

(Read before the South Australian Branch
British Medical Association.)

PROFUSE HÆMATURIA FROM A SLIGHTLY MOVABLE KIDNEY.

By R. Earle Newton, M.B., C.M., F.R.C.S., late
Resident and Private Assistant to the Pro-
fessor of Surgery, Glasgow University. Perth,
Western Australia.

ALTHOUGH it is generally acknowledged that some blood may sometimes be present in cases of movable kidney, it is unusual, and when it does occur is generally so slight in amount that many text-books omit to mention its occurrence at all; others, however, stating that slight hæmaturia may occasionally occur. Anything like profuse hæmaturia, apart from other concomitant disease, must be somewhat rare when Morris* remarks, "I have operated upon several cases in which slight pyuria or hæmaturia and frequent ardent desire to micturate were symptoms in movable kidney." In another place the same author,† however, states that "hæmaturia in some cases to a rather abundant degree has been met with in association with movable kidney. I have explored the movable kidney in several instances, on account of pain and hæmaturia, and I have found it congested, and after the operation the symptoms have completely ceased."

I have myself met with cases in which a slight amount of blood in the urine was produced by movable kidney without other disease, as proved by operation, and the disappearance of all symptoms after nephropexy, but I have never seen any case except the following where the hæmorrhage was alarming:—

Mrs. G., a pale, thin, middle-aged woman, consulted me on February 8th, 1902, on account of pain in the right loin, frequency of micturition, and hæmaturia.

She had always been a healthy woman till five years ago. Has had several children, the youngest being about 10 years old.

Five years ago she had pain in the right loin, with some blood in her urine. Her medical attendant stated that she was passing a stone from her right kidney. The stone, however, has never yet appeared, and she has been subject to attacks of pain ever since. Attacks

*Surgical Diseases of the Kidneys and Ureter, vol. I., p. 114.
†*Ibid.*, p. 504.

of hæmaturia have also been present from time to time. Both the pain and hæmaturia have become markedly worse of late. She has lost weight and strength to a very considerable degree. No history of injury to abdomen or loin could be obtained. When she came to see me in my consulting rooms she was in very great pain. She had driven, as she said that exercise caused her great pain and caused blood to appear in her urine. Her pain was in the right loin, shooting downwards to the vulva, and she had an intense desire to micturate, which she states she is obliged to do every half-hour or so when she has the pain. She could, however, hold her urine for an hour, but doing so would cause much pain referred to the vulva. She never has to rise at night to pass water, and has no pain when she remains in the recumbent position. She had never noticed any tumour or lump in the abdomen. On examination great tenderness in right loin is produced which precludes accurate examination, but the right kidney seems larger than left and moves more on respiration, and can be just caught and detained between the hand on the loin and the hand in front.

The bladder was examined under an anæsthetic, but was found absolutely healthy. Nothing could be found in the pelvis nor in the abdomen except an apparently slightly enlarged right kidney. Nothing could be detected in the uterus by palpation either through the abdominal wall or per vaginam. The urine was examined on five occasions. On three occasions it looked like rather watery blood, the fourth specimen showed a trace of blood in an acid urine, and the fifth was free from blood or albumin, and was acid. No crystals or casts were found. No tubercle bacilli could be discovered, but a small quantity of pus was found in the last specimen.

At the operation, the right kidney was explored through the ordinary lumbar incision, downwards and outwards from below twelfth rib. The kidney was larger than usual, and was considerably congested, but otherwise apparently healthy. It was incised on its convex border, and the kidney, calyces, and pelvis were carefully explored, but nothing could be found, and no stone or obstruction was present in the ureter. The renal pelvis was slightly enlarged, and the upper part of ureter seemed a little thickened. Bleeding was easily controlled by digitally compressing the renal artery. The capsule was stitched to the lumbar aponeurosis by four silk sutures, a gauze drain inserted down to the kidney, and the rest of the wound closed.

The patient made an uninterrupted recovery, and after the first 24 hours had no blood in her

urine. She has never had any pain or frequency of micturition since the operation, and now seven months after operation is able to walk about freely and look after her house and family. Her kidney remains firmly fixed.

I confess that I did not consider prior to operation that the slight mobility of her right kidney was the probable and only cause of her trouble, but suspected the presence of a calculus. In the light of the operation, and subsequent freedom from all symptoms, there can be no doubt that her attacks, which were brought on by exercise or prolonged standing, and had persisted for five years, were due to the mobility of her right kidney.

CLINICAL AND PATHOLOGICAL NOTES.

DERMOID CYST OF THE UPPER JAW.

A DERMOID cyst of the upper jaw, originating in the interval between præmaxilla and right maxilla of a female aged 42 years came under my notice and was easily enucleated. It had attained the size of a large walnut, and contained a dark oily fluid highly charged with cholesterin crystals. The cavity left in the jaw had a smooth, hard surface, and corresponded to about two-thirds of the mass of the tumour. The root of the right canine was exposed in the lower part. The incised mucous membrane was invaginated, and the hole plugged with iodoform gauze. Now, three weeks after, the bone is covered with healthy granulations, over which the mucous membrane is extending.

The case is reported because of the rarity of dermoids in this region, and because of the importance of recognising this comparatively trivial condition from a malignant epulis which it simulated.

FRED. J. T. SAWKINS, M.B., Ch.M. (Syd.).
College-street, Sydney.

CONGENITAL HYPERTROPHIC STENOSIS OF THE PYLORUS.

IN an interesting paper read before the South Australian Branch of the British Medical Association, and published in the last issue of the *Australasian Medical Gazette*, the author (Dr. Lendon) asks: "How comes the pylorus to be hypertrophied?"

As the theories already advanced—such as attributing the condition to a lesion of the nervous system or to a congenital gastric spasm—fail to give any mental satisfaction, it may be well to turn and see what light, if any,

the history—individual and ancestral—of the region affected may throw on this strange freak of nature.

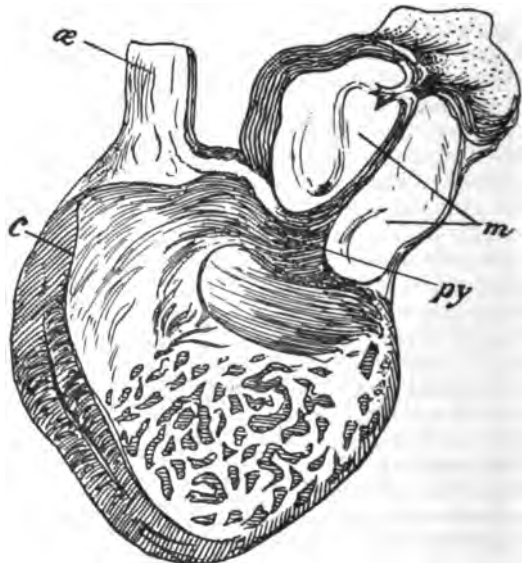
On looking at the food tube as a whole from a biologic point of view, what strikes one is that those parts that are anatomically variable in different species—such as the pylorus, the cæco-appendix, the œsophagus, the oral and anal orifices—are remarkable for their pathological susceptibility. Both individually and ancestrally the *pars pylorica* is a site of considerable variation. In this region we have traces of a second gastric chamber in the bulging known as the antrum pylori; this is marked off from the remainder of the viscus by the pre-pyloric sulcus, and over the entire region course bands of muscular tissue which vary in different subjects. The pyloric valve itself is subject to marked variation in the thickness of the muscular ring, in the projection of the mucous fold, in the shape, size and position of the opening. Thus, though the orifice is usually circular, it is occasionally oval and not infrequently placed to one side. Sometimes instead of being a perfect ring it is bounded by two crescentic folds, one above, the other below; or there may be only one such fold. The mucous membrane differs markedly from that of the rest of the viscus, so that altogether it is a region of considerable structural variability.

As we ascend the animal scale we note that this region is the site of the "gastric mill," a peculiar crushing mechanism in the great groups of insects and crustacea. As the primitive alimentary canal enters the vertebrate subkingdom, the history of its development might be epitomised by saying that there is a dilatation of this portion and a coiling of that—the response of internal conditions to external demands, according to the alimentary needs of the different forms to which it belongs. When we arrive at *birds* we note a marked advancement in the line of complexity. Besides a special dilatation, known as the crop, where the soaking of the food materials takes place we have a reappearance of the old crustacean "gastric mill" in the stomach proper in the well-known gizzard, which corresponds to the pyloric region of the mammalian stomach; not only this, but the "gastric mill" persists in certain edentate mammals, such as the great ant-eater, and in some of the armadillos.

From the individual variability and the ancestral instability of the pyloric region we are half prepared beforehand to expect an occasional excursion beyond the normal orbit of structural variation. The lines of least resistance for such excursions in organs generally, are almost invariably in the direction

of a corresponding structure in a lower and adult member of the group to which man belongs. As Darwin says: "Certain structures regularly occurring in the lower members of man's own class occasionally make their appearance in him, though not found in the normal human embryo; or if normally present in the human embryo they become abnormally developed, although in a manner which is normal in the lower members of the group."

Turning from these biologic considerations to their application to the case in question, I think it will seem at least probable that congenital hypertrophic stenosis of the pylorus is an instance of reversion to the edentate pylorus as seen in the armadillo or the great ant-eater. If we compare the description given



LONGITUDINAL SECTION OF THE STOMACH OF THE GREAT ANT-EATER (*Myrmecophaga jubata*).

a, œsophagus; *c*, cardiac division of the stomach; *m*, thickened muscular walls (or "gizzard") of pyloric portion of stomach; *py*, orifice of pyloric division of stomach.

(After Owen.)

(Taken from Mivart's "Lessons in Elementary Anatomy").

by Dr. Lendon of the post-mortem examination of his case with the accompanying diagram of the pylorus in the great ant-eater, we will, I think, be struck by the close resemblance between them: both conditions are anatomically similar, namely, hypertrophied circular muscular fibres in the pyloric region. The ant-eater's pylorus is the physiological type of what is found in man only under abnormal conditions, and they are both lineal descendants of the crustacean "gastric mill" or grinding stomach.

J. FLYNN, M.B.

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RODENT ULCER OF FACE TREATED BY X-RAYS.

P.C., aged 68, a carpenter by occupation, was admitted to the Sydney Hospital last June. On examination a large fungating mass was present, involving the bridge of the nose, extending upwards over portion of the forehead, and on each side as far as the inner canthus of each eye. On the right side as well a hard and fixed mass, the size of a marble, occupied the inner and upper angle of the orbit.

He gave a history of a small warty growth having appeared 20 years ago near the inner angle of the right eye. This gradually increased in size, and after five years' duration the growth was removed. Shortly after the operation it recurred, and increased in size, and seven years afterwards a second operation was performed. This was successful for a time only, when a recurrence was again noticed, and this time the growth increased rather more rapidly, till it reached the dimensions above described, as seen on reference to the illustration on page 626.

Dr. R. Steer Bowker kindly handed me over the case for treatment in the skiagraphic department.

A portion of the growth was examined, and pronounced by Dr. Jamieson to be rodent ulcer. The affected parts were subjected to the rays almost daily for a period of three months, and rapid improvement followed. Absorption of the diseased tissues was produced, and new epithelium was soon deposited over the healthy base, so that when treatment ceased a pinkish-white healthy-looking scar occupied the original seat of the growth.

Most remarkable about the case was the rapid way in which the large mass occupying the inner angle of the eye disappeared, and so unveiled the inner half of the patient's eye, which had previously been covered.

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**TUBERCULAR GLAND SIMULATING
APPENDICITIS.**

F.S., *æt.* 13½ yrs., had been ailing for 12 months with dyspeptic symptoms and neuralgia, which were not relieved by the removal of teeth or by internal treatment. She was brought to me on July 3rd, 1902, complaining of pain in right iliac region, vomiting after food, and continuous nausea; she also stated that she felt a distinct lump in the flank.

Temperature was 102° F. On examination a distinct hard enlargement over the appendicular region could be felt. I ordered her to

bed and watched her for several days, during which temperature varied from 100° F. to 103° F. On July 7th I operated, making the usual incision over centre of swelling, and found a large fluctuating gland under the position of the appendix; and on examining more closely, a chain of yellow caseating glands extended parallel with the right iliac artery on the floor of the peritoneal cavity as far as the junction with the abdominal aorta. The appendix itself was inflamed, but was not suppurating, and was longer than usual and thickened. This was removed and the peritoneal cavity washed out with saline solution as carefully as possible, a gauze plug was inserted down to the suppurating gland and left in position, and the external wound left open in order to allow the escape of pus from the cavity through the track made by the gauze.

The after history of the case was uneventful, except that a free discharge of pus came through the wound after the first 24 hours, and it drained freely away for about a fortnight, and then the discharge gradually ceased and the wound healed up in about two months. The patient's general health is now better than it has been for the last 12 months.

The points to be noticed are, first, the difficulty in diagnosis of such a case before opening up the abdomen, and secondly, the question of whether it would be better to open the suppurating gland at once, or to leave it alone until it burst, and trust to its finding the track left by the gauze plug to discharge through.

There was no means of shutting it off from the general peritoneal cavity, and if it had been opened leakage would be almost sure to occur into the peritoneum. As the case turned out all right, I consider that I was very lucky.

H. W. BRYANT, L.R.C.P. *et* S., Edin.
Williamstown, Victoria.

REVIEWS AND NOTICES OF BOOKS.

ATLAS AND EPITOME OF SPECIAL PATHOLOGIC HISTOLOGY
BY DOCENT DR. HERMANN DÜRECK. Philadelphia
and London: W. B. Saunders & Co. Melbourne:
James Little. Price, 15s.

This is the second volume of a series on pathological histology, and comprises a description of the diseases of the liver, urinary organs, sexual organs, nervous system, skin, muscles and bones. The chief feature of the work is the large number of beautifully reproduced coloured lithographs. There have been introduced into this manual illustrations of many conditions which one finds with difficulty in the ordinary works on special pathology. The illustrations are also accompanied by brief descriptions of most of the pathological conditions found in diseases affecting the organs and systems named. Works



BEFORE TREATMENT.



AFTER TREATMENT.

CASE OF RODENT ULCER OF THE FACE.

ILLUSTRATING DR. L. HERSCHELL HARRIS' NOTE ON "THERAPEUTICS OF THE RÖNTGEN RAYS." (See page 125.)

of this kind cannot be expected to take the place of the well-known text-books on this subject, but they will be found to be of great service when used in conjunction with these works. The nomenclature adopted in some instances does not accord with that found in most English works on the subject. For instance, the benign papilloma of the bladder is referred to as the "papillary fibroma of the bladder."

It contains, among descriptions of the rarer conditions found, an excellent account of fat necrosis of the pancreas and of pancreatic apoplexy. It also refers to a subject known as uterine apoplexy, which is not found mentioned in any of the ordinary English text-books.

This work will be found of especial service to those practitioners whose duties bring them much in contact with the work of the autopsy room, but will also be found useful as a work of reference to the general practitioner. S.J.

PRACTICAL MANUAL OF INSANITY. For the Student and General Practitioner. By Daniel R. Brower, A.M., M.D., LL.D., Professor of Nervous and Mental Diseases in Rush Medical College, etc. Philadelphia and London: W. B. Saunders & Co. Melbourne: James Little. 1902. Cloth, 15s net.

This book is written in a more readable style than most manuals on insanity, but it seems to be rather too diffuse to be recommended as a manual for the student, who requires something more definite and concise, even though it be less interesting. This objection, however, would not apply in the case of a general practitioner. The work has, of course, a great deal in common with most other manuals, but differs from most in that it omits the many tedious reports of cases with which writers are so prone to pad out their books.

The introductory chapters deal in a capable way with the etiology, general symptomatology, course and terminations, etc. The therapeutics omit any mention of perhaps the best of all modern methods of treatment for many acute cases, viz., the bath treatment. The advisability of recommending Hyoscin as a sedative is more than doubtful; it is very depressing in its effects, at times producing severe collapse, especially in many excited cases, and it apparently only acts by inducing inability to use the muscles, whilst the cerebral storm continues with unabated force. The pathology is but briefly treated, and one is rather led to expect great developments from a theory now practically disproved, viz., that of the movement of neurones. Most of the chapters in the body of the book are interesting and instructive, that on paranoia especially so. The term primary confusional insanity is made to include considerably more than is usually understood by that term, and many alienists would probably class cases as acute dementia or as acute delirious mania which the authors would include in their division of primary confusional insanity. The illustrations are good, and to those desirous of obtaining a general knowledge of insanity in a readable form the book can be recommended. J.F.F.

TEXT BOOK OF PHARMACOLOGY. By Torald Sollmann, M.D. Philadelphia and London: W. B. Saunders and Co. Melbourne: Jas. Little. Price, 12s 6d.

This work is most comprehensive in its scope, thoroughly modern in its teaching, and very crisp in its style. The author has evidently taken great care to make it at once practical yet reliable, and we think has succeeded in so doing. At first sight the reader might be led to regard this treatise as a mere compilation, but

more careful study of the contents would dispel any such mistake, although undoubtedly the influence of the teaching of Professor Schmiedeberg, of Strassburg, is very distinctly evident in the pharmacological sections.

The tendency of pharmacological descriptions to assume scientific rather than remedially practical lines has been successfully avoided, the therapeutic applications of the various agencies being, on the whole, very satisfactorily, though at times perhaps too tersely, given.

The treatise includes all those subjects which are usually grouped under *materia medica* and therapeutics, and incorporated into one teaching unit in many American Universities, and hence we find portions at the end of the work devoted to certain experiments, chemical and pharmacological, which can be conveniently used for purposes of demonstration.

Since the drugs and preparations of the British Pharmacopoeia are enumerated and described equally with those of the United States Pharmacopoeia, we can the more heartily recommend this volume to our readers. T.S.D.

A SYSTEM OF PHYSIOLOGIC THERAPEUTICS. Edited by Solomon Solis Cohen, M.D. Vol. vi.—Alimentary Therapeutics. By Nathan S. Davis, jun., M.D. Philadelphia: P. Blakiston's, Son & Co. Sydney: L. Bruck. Price, 10s per vol.

This volume gives in the handy form characterising the series a *resumé* of the subject such as the general practitioner would like to have.

Extensive and effective use has been made of that most valuable source of information, the studies of food and dietetics carried out by the United States Department of Agriculture.

Upon infant feeding the reader will naturally seek for information, remembering the very great interest which investigators in the United States have taken in this exceedingly important question—an interest which has resulted in the building up of an industry based upon employing suitable milk food for children and invalids, food which may need to be sent hundreds of miles before reaching its destination.

Considerable space is given to this matter, and although many authorities in Europe are rather inclined to look upon the refinements here set out as savouring of hair-splitting, the majority of practitioners must feel convinced that this is far from being the case, and that the directions given will be decidedly productive of lessening of that death rate which under certain conditions attains an appalling percentage.

The remaining articles upon foods and diet in disease are all clearly written and thoroughly up to date, and we can congratulate the author on having made so good use of the space available in a work of such moderate size. T.S.D.

ATLAS AND PRINCIPLES OF BACTERIOLOGY AND TEXT BOOK OF SPECIAL BACTERIOLOGIC DIAGNOSIS. By Prof. K. B. Lehmann and R. O. Neumann, Ph. D., M.D., Edited by George H. Weaver, M.D., Assistant Professor of Pathology, Rush Medical College, Chicago. Philadelphia and London: W. B. Saunders & Co. Melbourne: Jas. Little.

Lehmann & Neumann's Atlas is widely known among bacteriologists, and is probably one of the most valuable of the "Atlas" series of illustrated medical manuals. The illustrations are accurate and beautiful. The present edition is turned out in the very best style. Printing and paper are excellent. W.G.A.

THE CLIMATES AND BATHS OF GREAT BRITAIN. The report of a committee of the Royal Medical and Chirurgical Society of London. Vol. II. London: Macmillan & Co., Ltd. Price, 12s 6d.

This is an aggregation of original articles devoted to the elucidating from a medical point of view the climates of London and of the central and northern portions of England, together with those of Wales and of Ireland. The work as undertaken by the Royal Medical and Chirurgical Society is thus completed, but no mention of the climates of Scotland is given because of the committee unfortunately failing to secure the necessary local co-operation. The names of the contributors sufficiently evidence the high standard aimed at by the promoters of the work.

The first article considers London and Middlesex, and is by Wm. Ewart, M.D., F.R.C.P., and affords a comprehensive and interesting account of those districts, which well repays the time spent in studying it.

Amongst the other items is one by the late Dr. D. J. Leech upon North Wales, written in a style worthy of the reputation of its lamented author.

There is naturally great dissimilarity in the articles, which is greatly due to the material (meteorological statistics, etc.) available being so varied in its nature and scope.

This departure from a stereotyped method is specially noticeable in a most readable account of the climate of Ireland by Sir J. W. Moore, which has a distinct resemblance to a well-written guide to Ireland—for legend, history, etymology, poetry, geology, botany, topography, and an account of the facilities for sport and other forms of exercise are all brought in to help one to know how to aid a patient to regain health or, at least, prolong life. Indeed, after reading this brilliantly written description, one almost wonders whether it is best to adhere to the more statistical method of the earlier articles. Reference is in each district given to the leading spa waters, and includes in most cases full analyses.

Much good must come of having such a work available in the library of any practitioner of standing in Great Britain, but we must repeat that it is matter for great regret that Scotland and its islands, with all their possibilities as health resorts, have not found an author or authors to celebrate their virtues. T.S.D.

DOSE BOOK AND MANUAL OF PRESCRIPTION-WRITING. By E. Q. Thornton, M.D., Ph.G. Second edition. Price 10s. Philadelphia and London: W. B. Saunders & Co. Melbourne: Jas. Little.

Students in their earlier years often require some short account of drugs as regards nature, constituents, preparations, etc., to enable them to follow more easily the work which they see going on in hospital. Such information the volume before us aims at giving. It makes clear the various measures employed in America and Great Britain, including the decimal system, shows how to write a prescription, and, in these days of ignorance of Latin, gives much help to the despairing student, which probably would be more of use in America, though we fear even in our land would be often needful. Incompatibilities, solubilities, and the various forms in which drugs are put up are given with unusual detail. By means of illustrations much aid to the written descriptions is afforded, and while the price, type, paper, etc., of this work aids its utility, we regret that the latter for Australians is limited by the preparations mentioned being only those in the United States Pharmacopoeia. T.S.D.

ATLAS AND EPITOME OF OPERATIVE SURGERY. By Otto Zuckerkandl. Second edition. Edited by C. Chalmers Da Costa. Philadelphia: W. B. Saunders and Co. Melbourne: Jas. Little, Bourke-street. Price, 17s 6d.

This book is a fair one of its class, and gives plenty of illustrations, which are diagrammatic, and answer the purpose very well indeed. There appears to be an unnecessary amount of detail in connection with the section dealing with amputations and certain matters of pure surgical carpentry, whereas some of the more common, and consequently more important, surgical conditions are dealt with by no means fully, and leave much to be desired. There are a few very good plates illustrating plastic surgery, but cleft palate is entirely omitted. A trifle over two pages deals somewhat crudely with the operative treatment of the gall-bladder and bile ducts.

There certainly are better books. The great fault lies in the fact that this book is not evenly balanced. H.C.H.

GIBSON AND RUSSELL'S PHYSICAL DIAGNOSIS. Third edition. Revised and rewritten by Francis D. Boyd, C.M.G., M.D., F.R.C.P. Edin., Assistant Physician Royal Infirmary, Edinburgh, formerly Clinical Medicine Tutor, Royal Infirmary, Edinburgh. Edinburgh and London: Young J. Pentland. Sydney: Angus and Robertson. 1902.

This edition has been revised and in large part rewritten by Dr. Boyd, and some new sections have been added on the Examination of the Blood, the Examination of the Gastric Contents, Intestinal Parasites, the Cranial Nerves, and Clinical Bacteriology. These additional chapters render the work more complete and more valuable as a guide for students and general practitioners. The illustrations are good, the definitions and descriptions are clear and succinct, and, in our opinion, this is one of the best aids to the clinical investigation of disease. G.E.R.

AMERICAN EDITION OF NOTHNAGEL'S ENCYCLOPÆDIA: Variola, Vaccination, Varicella, Cholera, Erysipelas, Whooping Cough, Hay Fever. Edited, with additions, by Sir J. W. Moore, B.A., M.D., F.R.C.P.I., Professor of the Practice of Medicine, Royal College of Surgeons, Ireland. Illustrated. Philadelphia and London: W. B. Saunders & Co. Melbourne: Jas. Little. 1902. Price, 25s.

This forms the second volume of the authorised translation of Professor Nothnagel's Encyclopædia now being made under the editorial supervision of Dr. Alfred Stengel. It contains a series of monographs upon variola, vaccination (Dr. A. Immermann, of Basle), varicella (Dr. Th. von Jurgensen, of Tübingen), cholera Asiatica, cholera nostras (Dr. C. Liebermeister, of Tübingen), erysipelas, erysipeloid (Dr. Herman Lenhartz, of Hamburg), whooping cough and hay fever (Dr. Georg Sticker, of Giessen). These various subjects are all dealt with in a masterly fashion, and several of the articles, notably those upon vaccination and upon erysipelas, are of exceptional excellence. The information is very full, and the few points upon which serious difference of opinion might arise are covered by the editorial comments of Sir J. W. Moore. The book as a whole forms a handsome volume as worthy of a place in a physician's library, as its contents are deserving of his attentive study. F.T.

THE AUSTRALASIAN MEDICAL GAZETTE.

SYDNEY, 20TH DECEMBER, 1902.

TUBERCULOSIS FROM AN INSURANCE POINT OF VIEW.

For many years it was popularly believed that pulmonary tuberculosis was pre-eminently an illustration of an hereditary disease. Before the discovery of the tubercle bacillus by Koch it was commonly considered to be directly hereditary; but when the doctrine of the infectivity of phthisis was advanced it was believed that exposure to infection by the specific organism was the complete solution of the question of the origin of pulmonary tuberculosis in any particular patient. The tendency is again for the pendulum to swing backwards, and it is recognised that apparently some inherited predisposition is an important favouring condition for the development of the organism in the system, and the manifestation of the signs of the disease.

Some very interesting facts bearing on this question are given by Dr. CLAUD MUIRHEAD in his Report on the Causes of Death among the Assured in the Scottish Widows' and Life Assurance Society. He first shows from the figures that those proponents who are under the normal weight show a much greater proclivity to the development of pulmonary tuberculosis, and a larger proportion of these died from this disease than those who were over weight at the time of entry, the proportion being something like 80 to 40 per cent. But some other figures are of still greater importance as showing that a family proclivity to the disease does not lead to the actual development of pulmonary tuberculosis in the members in a larger number than 34·72 per cent., while the family history of patients who died from

apoplexy or other non-tubercular causes was tainted with tubercle in 47·21 per cent. The figures, based on an examination of over 500 members who died from phthisis, and over 500 who died from other causes, are sufficiently striking as showing that even after making the fullest allowance for errors an hereditary history of tuberculosis does not occur in a larger percentage than 34. This percentage is large enough, but still is much smaller than would have been supposed in past times.

Other facts elicited by this enquiry show that pulmonary tuberculosis is not a disease confined to youth or middle age. The data adduced by Dr. MUIRHEAD show that between the ages of 45 and 75 the percentage of actual deaths from this disease was large, and that the death rate for 1874-94 for the three decennial groups covered by these ages was somewhat higher than for the group 20 to 25. Further, the average age at death of members dying from pulmonary tuberculosis has been steadily rising from 39·6 to 42·8 years in the decennial periods referred to. The general mortality from tuberculosis during the same period has decreased from 10·071 per cent. of the deaths in the septennium 1874-80 to 7·709 per cent. in the period from 1888-1894.

Dr. MUIRHEAD emphasises the fact that there is still too high a mortality from pulmonary tuberculosis among the members of this Society, and points out the importance of special care and attention to certain signs suggestive of incipient tuberculosis. These are a slight dry cough, often referred to the throat, dyspepsia, a rapid pulse, slight temperature, a body weight below normal, and the family history. But while every care may be taken to examine closely every proponent for life insurance in whom one has reason to suspect an incipient tuberculosis, a certain number of members whose lives at the time of entry have been first class from an insurance point of view will still die from accidental infection by the tubercle bacillus. It is manifestly impossible under

present conditions to prevent this, but with each year of increasing knowledge and attempts to prevent infection by those suffering from this disease will the danger of infection diminish, and the percentage of lives accepted as first class who subsequently die from tuberculosis will also diminish.

THE PROPOSED AMENDMENT OF THE POISONS ACT.

As we mentioned in our October issue, a Bill to amend the Poisons Act has been introduced into the New South Wales Legislative Assembly by Mr. PRICE. The object of the amendment is to facilitate the sale of proprietary medicines by storekeepers without their being obliged to obtain a "poison license." A large number of petitions have been presented to Parliament in favour of the measure, and last month a large deputation waited on the Premier to seek his support in securing the passage of the Bill. But it is quite apparent that these gentlemen fail entirely to realise the gravity of the situation, and we are glad to note that not only the Pharmacy Board, but also the Board of Health, are strenuously opposing this proposed amendment of the Poisons Act.

At first the statements made by the members of the deputation appear very plausible. It may appear a hardship that a country resident may have to travel several miles to a chemist's shop to buy a proprietary medicine which the local storekeeper only a few yards away is quite willing to sell if he be allowed to do so without being hampered by the provisions of the Poisons Act. But there are other and much more weighty arguments to be adduced against any interference with the stringent regulations of this Act. The main object of the Act is to prevent the general public readily gaining possession of strong poisons which might be the cause of accidental or criminal poisoning. While some of these proprietary medicines may be harmless enough in themselves when administered in the doses recommended, we

know, as a matter of fact, that persons do not always adhere strictly to the directions issued, and take much larger doses on the supposition that if a small dose does some good a larger dose will do more good. Moreover, patent medicines are not all so "harmless" as the Premier appears to think: some contain virulent alkaloid poisons, and the indiscriminate use of the preparations by the public may lead to serious results. It is true that the general public will have patent medicines to the end of time, and they will suffer in consequence; but to facilitate the sale of the noxious and often poisonous compounds by storekeepers and traders ignorant of their true composition and nature is to open the door to serious damage to the public health, and should be strenuously resisted.

So far from the provisions of this Act being relaxed in any degree, we are of opinion that the Act should be amended in the opposite direction; and the sale of such deadly poisons as carbolic acid, arsenical and phosphorous rat pastes, etc., should be very much more restricted than at present. No doubt would-be suicides and secret poisoners will by some means or other manage to secure the weapons to attain their ends; but the more difficult it is to obtain possession of the deadly alkaloidal poisons, which so readily adapt themselves to the object of the criminal poisoner, the less we shall hear of accidental or criminal poisonings.

THE MONTH.

Hospital Out-patients.

For some time past trouble has been experienced in effectually dealing with the continually increasing work in the out-patients' department of the Balmain Hospital. The matter has been considered by the committee of management, and it has been decided that, in addition to a declaration from the patient to the effect that he or she was unable to pay for medical treatment, the following rule should also be printed on the ticket for outdoor relief:—"That the applicant must not belong to any club or society the members of which are provided with medical attendance, nor of

any institution the members of which are already in receipt of medical relief." While this principle should be adopted as a general rule, we think that the out-patients' departments of the public hospitals should be utilised for securing consultations with specialists by those unable to pay the specialists' fees. It would be hard upon a club patient who needed some special advice or special line of treatment, and was unable to obtain it otherwise, if he were debarred from attending the out-patients' department at a hospital solely on the ground that he belonged to a medical benefit society.

Indian Support of Victorian Hospitals.

A meeting of representatives of the Indian community was held at the office of Mr. Teepoo Hall, Collins-street, Melbourne, on November 27th, to consider the question of the formation of a committee for the purpose of raising money for the hospitals. Among those in the room were representatives of every Indian caste and sect in Victoria. After discussion it was unanimously resolved: "That a committee of the Indians resident in Melbourne be formed for the purpose of raising moneys for the hospitals, both in town and country." It was also resolved: "That the members present from the Punjaubis go back among their people and ask them to choose their members on the committee, the representatives of all the other castes and religions to act as appointed."

Open-Air Sanatorium at King's Tableland, New South Wales.

The sanatorium at King's Tableland, near Wentworth Falls (N.S.W.), which has been erected by the Committee of the Queen Victoria Home for Consumptives, is now practically completed, and will be opened by his Excellency Sir Harry Rawson, K.C.B., on February 6th. Dr. McIntyre Sinclair, late assistant medical officer at the Cotswold Sanatorium, near Gloucester, England, has been appointed resident medical officer, and applications are now being invited for the post of matron. The sum of £3535 has been expended on the site and buildings, and £400 is to be spent on the erection of a cottage for the resident medical officer. Messrs. David Jones and Co. have volunteered to furnish the wards.

An Inebriate Home.

Last month a Retreat for the Treatment and Cure of Alcoholism and Narcotism, under the management of the Sydney Methodist Mission, was opened by Sir John See. This is the first institution licensed by the Government under

the Inebriates Act of 1900, and is situated on the heights of Marrickville. Sir John See, in declaring the Retreat open, referred to the passing of the Inebriates Act of 1900, which he thought would prove one of the best measures ever placed on the statute book of the State. The Premier then at some length explained the objects, aims, and basic principles of the movement. The Retreat was not a gaol. No person need remain a moment longer here than he desired to do so. To keep men imprisoned in an inebriates' home or in an ordinary prison simply meant in most cases that as soon as they got out they at once flew to the evil which had placed them in a state of confinement. But they appealed to a person's better nature, to their finer humanity; for, after all, there was in every man, no matter how depraved and fallen he might have become, a soft and tender spot from which his better qualities could be drawn. An institution of this kind went a long way to bring about results of this nature.

Dr. W. C. McClelland, the medical officer of the Retreat, explained that the mission had not made any profit out of the undertaking, and it was not their object to do so.

New South Wales Institution for the Deaf, Dumb and Blind.

We have been favoured with a copy of the 41st annual report of this important institution. The directors again emphasise the importance of deaf, dumb and blind children being sent to the institution between the ages of seven and fourteen years, so that their education may be begun as early as possible. A compulsory Education Act for this class of children, such as is in force in England, would be of great assistance in these States. A useful addition to the buildings is an institute for the adult deaf, which was opened in June last. The income for the year amounted to £4807 7s 9d, and the expenditure to £4607 9s 4d. The balance, £199 18s 5d, was transferred to the institute for the adult deaf account to reduce the liability thereon. The president (Sir Arthur Renwick, K.B., M.L.C.) and the honorary medical staff were re-elected.

Medical Charities in Victoria.

From an article in the Melbourne *Age* we learn that Victoria has made more than ample provision for the sick and the infirm. The list of public charities to which the Treasury gives a subsidy includes 50 hospitals, 6 benevolent asylums, 7 orphan asylums, asylums for the blind, the deaf and dumb and for infants, 10 rescue homes, 71 ladies' benevolent asylums,

3 medical dispensaries, and 14 philanthropic associations. The hospitals provide 2518 beds, while the total number of patients who had occupied them during the year was 23,000. The other institutions provide 4300 beds. The total income of these institutions for the year was about £260,000, of which the Government supplied £110,000. This subsidy is paid on the daily average of beds occupied, and the average amount of the subsidy hitherto given is £22 per bed. The retrenchment scheme of the Government provides for the reduction of the grant to charities from £110,000 to £90,000, or 18 per cent., which means the reduction of the subsidy per bed from £29 to about £23. In the year 1901-1902 private contributions yielded £64,000 for the hospitals, and it is not likely that any increase will come from this source sufficient to make up for the lessening of the subsidy. It is an open question whether a subsidy of £90,000 is not sufficient for the charitable institutions of the State if they were placed upon a sound basis. The Royal Commission of 1901 suggested the closing of a number of unnecessary hospitals. Inquiries indicate that at least 20 of the charitable institutions in the State might be closed without any loss of efficiency, and that the saving to the State by centralisation might be as much as £20,000 a year. That more institutions are being maintained than are needed is shown by the fact that on June 30th, of the 2518 beds provided by the hospitals, only 1798 were occupied; while of the 7690 beds provided by all the institutions, only 6252 were occupied.

Outside Doctors and Hospital Patients.

A correspondent in the *Chemist and Druggist* states that the right of Dr. MacGregor, Inspector-General of Hospitals and Charitable Institutions in New Zealand, to recommend the withholding of the Government subsidy to the Gisborne Hospital, unless the practice of allowing outside medical men to treat patients in the public or private wards was discontinued, was questioned at a meeting of the trustees of the institution recently. Some members argued that it was unfair that patients should be prevented from calling in whatever medical men they liked, paying, of course, for such services. Others maintained that Dr. MacGregor was quite right in his contention that the system of having the patients under the sole control of the medical superintendent was best. Eventually it was decided—"That no doctor other than the medical superintendent or his *locum tenens* be permitted to treat patients either in the public or private wards of the hospital."

BRITISH MEDICAL ASSOCIATION NEWS.

PROCEEDINGS OF AUSTRALASIAN BRANCHES.

New South Wales.

THE regular monthly meeting of the Branch was held at Royal Society's Room, Sydney, on Friday, November 28th, 1902. Dr. G. E. Rennie, president, in the chair. There were 52 members present.

Visitor: Dr. J. Leva.

The minutes of the previous meeting were read and confirmed.

THE PRESIDENT announced the nomination of Drs. Marco Giommi, F. S. Hawthorne, and J. Leva for membership of the Association.

Dr. F. A. BENNET exhibited a patient suffering from lichen pilaris, and read some notes on it. (See page 615.)

Dr. HERSCHELL HARRIS gave a lantern exhibition of selected skiagrams.

Dr. J. L. BEESTON read a paper on "Nine Cases of Hysterectomy." (See page 611.)

Dr. WORRELL thought the meeting was indebted to Dr. Beeston for coming so far to lay the results of his work before it. He himself had met with a considerable number of cases in which myomata were a serious complication of pregnancy and labour. In a paper upon hysterectomy he had referred to three cases in which he had done supravaginal amputation of the pregnant uterus for myomata blocking the pelvis and immovably fixed. He had enucleated a myoma the size of a fetal head at term from a uterus containing a seventh month pregnancy; and although the uterine cavity was not opened, premature labour took place ten days afterwards; the patient recovered. He had come across two cases in which craniotomy had been performed for dystocia caused by myomata; one of these he had treated by hystero-myomectomy, but the other refused any operation and he had lost sight of her. He had seen in consultation another case in which a myoma situated low down on the anterior wall had been so injured in the delivery of the child that it sloughed, and the patient died of pyæmia about the twentieth day of the puerperium. He had also seen cases in which abortion had occurred owing to the presence of myomata, and in several death had followed from infection of the tumour. Myomata were a far more deadly complication of pregnancy and labour than ovarian cysts, and therefore he urged that whenever they were causing or likely to cause symptoms, operation should be undertaken without delay. A wrong impression still existed in the minds of some practitioners as to the danger of operations for myomata. Patients had frequently told him their doctors had warned them against having a myoma removed "owing to the great risk." These same doctors did not hesitate to advise an operation for ovarian cyst, not apparently recognising that in a series of cases the mortality rate for the latter is higher than for the former. He himself had had a series of 24 consecutive recoveries after hystero-myomectomy by Professor Watson's method, and since then he had had another series of 29 consecutive recoveries, broken only by the death from the anæsthetic last week. He had not included myomectomies nor cases in which the uterus was removed for conditions other than myomata. The extra peritoneal treatment of the pedicle was outside discussion at the present day. Dr. Beeston had apparently now got on the right road; and as he had to work out the subject for himself without having the

advantage of living in the surgical atmosphere of a great metropolis, he deserved the greatest credit.

Dr. STEWART MCKAY said that the reports of the cases that Dr. Beeston had read to them illustrated the evolution that abdominal hysterectomy had undergone. It was only ten years ago that the late Mr. Lawson Tait removed all his fibroid tumours by means of the serrenoud. Now that instrument was abandoned except in performing Porro's operation, which would be done from time to time in preference to the Cesarean operation, as it is easier to perform. With reference to the case that gave rise to the title of Dr. Beeston's paper, he gathered from Dr. Worrall's remarks, and from Dr. Beeston's paper, that these gentlemen operated on pregnant uteri when they contained fibroid tumours; but, if they made this a rule, they were doing what was absolutely against the general consensus of opinion. There was no reason why a woman because she had a fibroid tumour should necessarily be operated on; still less was there any reason why one who was pregnant, and had a fibroid, should be submitted to an operation unless under quite exceptional circumstances; as, for instance, when the tumour was so placed that it would inevitably obstruct the labour. This being the case, he did not see why Dr. Beeston had operated on this particular case. Dr. Beeston had noted less shock in his vaginal cases. This was a general experience, and he thought that the explanation was supplied by Crill's experiments, which demonstrated that the handling of the uterus and ovaries did not necessarily give rise to shock, but that shock was much more likely to occur during abdominal operations when the manipulation extended from the uterus upwards over the intestines towards the stomach.

Mr. BARRINGTON congratulated Dr. Beeston on his paper, which was of great interest and much value as opening up a large field for discussion. He believed very strongly in curetting and cauterising the malignant focus in the uterus, with sewing up the cervix as securely as possible immediately before proceeding to radical operation, and that the instruments used for this preliminary should be discarded before the final disinfection preceding the major operation, it being important for lasting results to prevent by every means the possibility of "implantation cancer"; and he ventured to think that non-recurrence in the third case of vaginal hysterectomy was owing to this improvement in technique. He was glad to hear that Dr. Beeston was discarding silk for catgut, he himself not having left a non-absorbable ligature in the pelvis for the past four years; plain tendon, which he preferred, being quite efficacious. He had found abdominal hysterectomy simplified by carefully dissecting out and ligating each uterine artery before removing the uterus; for if this were done the safety of the ureters was assured, the blood of the tumour was auto-transfused through the uterine veins, and it was more surgical to tie a cleaned blood vessel than to incorporate it with much adventitious tissue. In regard to the treatment of the pregnant myomatous uterus, in a spirit of the friendliest criticism he submitted that in most cases the course of pregnancy and subsequent labour was not seriously influenced by the tumour, but that in a small proportion the life of mother and child were placed in jeopardy. Regarding this small residuum, seeing that two lives are involved, and our obvious duty is, if possible, to save both, it is better to leave matters alone until term, or until the child is viable, rejecting all radical measures unless symptoms of urgency supervene. Speaking in general terms, the lower the tumour is situated in the uterus the greater the liability to danger during labour; but by retraction of the uterine muscle during the parturient efforts, a tumour which at one time threatened the safety of the passenger may be drawn above the brim and allow it to pass without much

difficulty. He had had under observation a patient who was admitted into hospital with apparently an incarcerated myoma, but on the onset of labour the tumour rose above the brim, and forceps delivery took the place of a contemplated Cesarean section and hysterectomy. If the tumour be located in the pelvis—incarcerated or intra-ligamentously developed—careful examination under anaesthesia will help to determine whether it is advisable to wait and see what Nature will do or whether Cesarean section and sub-total hysterectomy should be undertaken before the onset of labour pains. The general consensus of opinion seems to be that Cesarean section with supra-vaginal hysterectomy is safer, and therefore preferable to delivery *per vias naturales*, if the latter involves the employment of much force either in pushing the tumour up or pulling the head through. He fully admitted that in exceptional cases it was absolutely necessary to interfere before the viability of the child, but he submitted that the symptoms should be urgent, prophylactic operating (on account of dangers which might supervene) being inadvisable.

Dr. TAYLOR YOUNG desired to thank Dr. Beeston not only for the paper just read, but also for coming all the way from Newcastle to give the Branch the result of his work in abdominal surgery. With reference to the remarks made by Dr. McKay, surely he had misunderstood both Dr. Beeston and Dr. Worrall. Their remarks seemed to him not to imply that they believed in operating in every case of pregnancy complicated with fibroids. Each case must be considered on its merits, and after careful examination. Then as to leaving fibroids in the non-gravid uterus, members would do well to read Dr. J. A. G. Hamilton's remarks as to early operation, as reported in the November number of the *A.M. Gazette*. While the general method adopted to-day is hysteromyomectomy, he (the speaker) believed before many years had passed that pan-hysteromyomectomy will be more generally done, as many cases are from time to time being recorded in which degenerative changes, in not a few cases malignant, had occurred in the remaining cervix. As to Dr. McKay's story about the patient who had been told by another surgeon, that if not operated upon she would be dead in three months, he would like to ask Dr. McKay from whom he got the statement—the other doctor or the patient? It is well always to receive very guardedly any opinion as conveyed by the patient, and if necessary have it confirmed or corrected by direct communication with the doctor.

Dr. BEESTON, in reply to Dr. McKay, said the reason he had operated in the case referred to was on account of there having been obstruction of the bowel during the first pregnancy. He begged to thank the members for the kind reception they had given his paper.

Dr. CHARLES MACLAURIN read a paper on "The Incidence, Symptoms and Treatment of Strangulated Hernia in Elderly People."

Dr. POCKLEY exhibited a growth removed from apex of orbit of a child of three years, with preservation of the globe.

The remaining business was postponed till the next meeting on December 12th.

Council Meetings.

THE Council met at the Association Rooms on Friday, November 7th, 1902. Present: Drs. Rennie, Crago, Pockley, Dick, Hankins, Jamieson, Foreman, Fiaschi, Worrall.

Lectures under auspices of the Civil Ambulance Brigade.—Matter left to be reported on.

Letter was read from a member asking for information with reference to lecturing to ambulance classes. Hon. Secretary's reply approved.

Insurance Fees.—The schedules of the City Mutual Life Association were considered. Letter from Eastern Suburbs Medical Association on the subject was read.

Resolved—"That the fee for examination of proponents for industrial insurances for policies under £100 may be 10s 6d each, and for all policies of £100 or over the minimum fee be £1 1s."

Resolved—"That the Eastern Suburbs Medical Association be informed that the Council approves of the action taken, and will assist in carrying out the object."

Letter was read from a member *re* terms for lodges. Hon. Secretary's reply approved.

The question of suing for fees was brought before the Council. The Crown Solicitor to be interviewed.

The Council met at the Association Rooms on Thursday evening, 4th December, 1902. Present—Drs. Rennie, Crago, Jamieson, Hankins, Newmarch, Brady, Worrall, Beeston, and Fiaschi.

The minutes of the previous meeting were read and confirmed.

The following new members were elected:—Dr. Cocks, Wentworth; Dr. Marco Giommi, Gilgandra; Dr. E. S. Hawthorne, Mudgee; and Dr. John Leva, Sydney.

Resolved—"That a special general meeting of the Branch be held in February next to deal with the question of insurance fees and the lodge practitioners' defence fund."

Correspondence with reference to the Petersham and Leichhardt Dispensary:—

Letter read from the Western Suburbs Medical Association stating that the Petersham and Leichhardt Dispensary was regarded by that Association as inimical to the interests of the profession.

Resolved—"That the Petersham and Leichhardt Friendly Societies' Dispensary be declared prejudicial to the interests of the medical profession, in accordance with Articles of Association No. 36."

Letter from the Home Association, enclosing fresh forms of application for membership.

Resolved—"That both forms be used for the present."

South Australia.

The usual monthly meeting was held at the University at 8 p.m. on Thursday, 27th November, 1902. Present: Dr. A. A. Hamilton and 34 members of the Branch, also several visitors.

Exhibits.—Drs. VERCO and HAYWARD each showed a patient with beri-beri.

Professor WATSON showed—

1.—A ten-pound roll of Adelaide biltong (Conrad's) with canvas wrapping, which formed part of Mr. Price-Maurice's stores on his recent (1902) exploring expedition, which crossed the Australian continent. It is more portable and less salty than the tinned beef used on the Western Australia goldfields and in South Africa during the late war. Notwithstanding the hardships entailed on the party by the loss of camels in a waterless desert, the health of its members, subsisting on this meat, remained good, as the intact condition of the medicine chest, generously supplied to the expedition by Messrs. Burroughs & Wellcome, can attest. In Mr. Price-Maurice's opinion it should be tried by the War Office.

Mr. PRICE-MAURICE.

2.—Uterus and adnexa from a unipara, *et.* 24, who was admitted as a case of tubal pregnancy. The uterus is overized and affected with fungoid endometritis (mimicked decidual discharge). The isthmus of left tube carries a marble-sized lump of muscular tissue, in

the centre of which is a collection of pus which communicates with the lumen of tube. The sigmoid flexure was adherent to the lump, from which pus escaped when the adhesion was separated. Two months ago Dr. Hamilton operated on a similar case. It is called "Salpingitis Nodosa Isthmica." In both cases the alternate tube was the seat of an ordinary pyosalpinx. In a dissecting room subject I have seen a sacculcation of the left isthmus containing cholesterine, etc., probably due to a similar condition years before death.

Dr. J. A. G. HAMILTON.

3.—Uterus and adnexa from a spinster, *et.* 52, with a six years' history of metrorrhagia, which during the last three months became terrible. A soft brain-like sarcoma of the fundus of recent growth in a uterus already carrying an ordinary hard myoma of the posterior wall of cervix explains the above sequence of symptoms. The sarcoma was just about to break through on the peritoneal surface when a timely pan-hysterectomy was performed.

Dr. J. A. G. HAMILTON.

4.—Stomach and duodenum of a female child who reached the age of three years, notwithstanding the presence of a duodenal diaphragm traversed by an ex-central slit-like opening barely admitting a slate pencil. At first sight it looked like a bilocular stomach, on account of the great distension hypertrophy of the first part of the duodenum. The bile and pancreatic ducts open just below the obstruction, hence the vomit never contained any bile. A duodeno-jejunostomy would have been as easy as a gastro-jejunostomy in this case, and probably a more suitable operation. The condition must not be confounded with the congenital pyloric obstruction so ably described at the last meeting by Dr. Lendon. In a specimen secured by the coroner (Dr. Ramsay Smith) some time ago there was no communication between the first part of the duodenum and the bowel below; the second portion of the duodenum was represented by a fibro-muscular cord. The bile and pancreatic ducts opened above the occlusion. The child only lived three days.

Dr. MARGARET WHITE.

5.—Conical cæcum and long straight gangrenous appendix which produced pelvic abscess and eventually general peritonitis, from a man, *et.* 21, who believed in medical treatment for his complaint.

Pathologist Adelaide Hospital.

5.—Contorted thickened inflamed appendix successfully removed early in an attack from a man, *et.* 20, who fell into surgical hands.

Dr. POULTON.

Dr. MARTEN showed a kidney which he had removed by lumbar nephrectomy. It was simply a mass of large abscesses varying from the size of a pigeon's egg to a duck's egg. The patient had had symptoms for three years.

Dr. POULTON showed a tube of "sterile glucose saline solution," as described by Mr. A. E. Barker in the "B.M.J.," March 29, 1902.

The minutes of the last meeting were taken as read and signed.

On the motion of Dr. HAYWARD, seconded by Drs. VERCO and DAY, the following resolution was unanimously carried: "That the South Australian Branch of the British Medical Association places on record its appreciation of the valuable services the retiring general secretary of the Association (Mr. Francis Fowke) rendered during his long term to the Association."

It was decided that the next meeting of the Branch should be in February next.

Dr. MARTEN read his paper on "Some Sequelæ of Syphilitic Infection" (see page 608), which was followed by a long discussion, in which Drs. Day, Hayward, J. A. G. Hamilton, Newland, Verco and others joined.

This was followed by Dr. HAYWARD's paper on "Some Medical Cases" (see page 614), and by a paper on "Morphia Tablets," by Dr. REISSMANN.

Queensland.

THE annual meeting of the Branch was held on Friday, December 5th, in the School of Arts Room, with the following attendance:—Dr. Hopkins (vice-president, in the chair), Drs. Thomson, Taylor, Byrne, Turner, Hawkes, Page, Robertson, Orr, Salter, Flynn, Fancourt Macdonald, Carvosso, Kerr Scott, Sutton, Culpin, Wilton Love and Brockway (hon. secretary).

Drs. Lucy Gullett and Page were declared elected members of the Branch.

Dr. HAWKES exhibited a plaster cast of teeth showing the typical characteristics of congenital syphilis.

The ballot having been taken, the following were declared elected to the various offices for the year 1903:—President: Dr. G. H. Hopkins (unopposed).

Vice-Presidents: Dr. W. S. Byrne and Dr. P. Bancroft (ex-president).

Secretary: Dr. A. B. Brockway (unopposed).

Treasurer: Dr. J. Espie Dods.

Curator of Library and Museum: Dr. C. S. Hawkes (unopposed).

Council: Dr. A. J. Turner, the Hon. W. F. Taylor, M.L.C., Dr. W. N. Robertson, Dr. Wilton Love.

Auditors: Dr. A. C. F. Halford, Dr. E. W. Kerr Scott.

REPORT OF THE COUNCIL FOR 1902.

Your Council have much pleasure in presenting the report of the year's work. Ten new members have been elected during the year, there has been one death (Dr. Wray), and three members have resigned in consequence of their leaving the State; the membership thus shows an increase of six, and a total of 121.

Your treasurer's statement will show a credit balance of about £50; and your secretary desires to thank the members for their courtesy in responding to his appeal for early payment of subscriptions, as much trouble and some expense are thereby saved. . . . There has been an average attendance of 17 at the meetings, being two more than in the year 1901.

The more important business of the meetings has been as follows:—

February: Notes on Intussusception—Dr. Aeneas McDonnell.

April: Epidemic Jaundice—Dr. Falkner. Medical Experiences in London and America—Dr. W. S. Byrne.

May: Puerperal Sepsis; its Pathology and Treatment—Dr. W. S. Byrne.

June: Some Methods and Results in Minor Surgery—Dr. Hawkes.

July: The Complete Mastoid Operation—Dr. J. Lockhart Gibson. Two Cases of Double Glaucoma, with Remarks on Etiology—Dr. J. Lockhart Gibson.

September: Abortions—Dr. Cameron.

October: Gastro-Enterostomy for Chronic Pyloric Obstruction—Dr. Hawkes.

Cases and specimens of interest have been exhibited at most of the meetings, and useful discussions have followed the reading of the papers. In addition to the above, meetings have taken place for the discussion of the relations existing between the members of the C.A.T.B., and also the B.A.F.S. Medical Institute. In the case of the latter, certain resolutions were passed which clearly define the attitude of members of the Branch towards medical men holding appointments likely to reflect discredit upon the profession. Your Council, while

admitting the necessity and value of such ethical discussions, would urge all members of the Branch to support the Medical Defence Society, whose particular function it is to consider and deal with such matters, in order that the time of the Branch may be devoted exclusively to the consideration of scientific questions.

The importance of the movement for the establishment of a pathological museum has been amply shown by the excellent collection made by the curator during the year. One meeting of the Branch was held in Toowoomba, with the view of increasing the interest of provincial members in the work of the Society—an example which has been followed by our colleagues of the New South Wales Branch. Though not largely attended, the meeting was a successful one; and you will be asked to consider if the result of the experiment will justify your Council in recommending that one of the meetings of the coming year be held at Ipswich.

There have been 11 Council meetings during the year, with the following record of attendances:—

Dr. P. Bancroft, president (absent on leave), 6; Dr. Hopkins, vice-president, 7; Dr. Taylor, vice-president, 9; Dr. Hawkes, curator, 10; Dr. Sutton, treasurer, 7; Dr. Marks (absent on leave), 5; Dr. Robertson, 7; Dr. Thomson, 5; Dr. Wield, 10; Dr. Brockway, secretary, 11.

Your attention will be called to an increase in the subscription payable to the parent association, and a necessary addition to the subscription of town and country members. Your thanks are due to the Editor of *The Australasian Medical Gazette* for consideration shown in printing papers and accounts of meetings; and to Dr. Ham, Commissioner of Public Health, for arrangements made for your comfort in the rooms where the meetings have been held; and to those members of the Branch who have contributed papers and exhibited specimens, particularly, perhaps, to Drs. Cameron and Flynn (of Ipswich), who have not thought the time lost on the occasion of their visits to Brisbane.

In conclusion, your Council express the hope that their successors in office, appointed by you this evening, may be able at the end of 1903 to report as useful and instructive a year as that which has now been brought to a close.

Signed on behalf of the Council,

G. HERBERT HOPKINS, Vice-President.
ARCHIBALD B. BROCKWAY, Hon. Sec.

It was resolved, on the motion of Dr. THOMSON, seconded by the PRESIDENT—"That the thanks of the Branch to the secretary be recorded in the report."

The report and financial statement, which showed a credit balance of £58, was read and adopted.

It was resolved to accept the offer of the committee of the School of Arts for the lease of a room for the library and museum and the hall for meetings.

The recommendation of the Council with reference to the increased subscription was adopted, namely, £3 3s for town members, including *A.M. Gazette*, and £2 8s without; £2 10s for country members, including the *Gazette*, and £1 15s without.

A discussion took place as to the attitude of the Branch towards the A.N.A., and it was resolved *nem. con.*—"That as the A.N.A. is not a purely benefit society, medical appointments in connection with it are inimical to the interests of the profession."

A recommendation from the Council with reference to the Bacteriological Institute was discussed, and it was resolved that representation be made to the Home Secretary in favour of granting free examination of specimens by the Bacteriological Institute in all cases where the nature of the disease is suspected to be one which is notifiable under the Act or phthisis.

REVIEW OF CURRENT MEDICAL LITERATURE.

SURGERY.

Gastro-enterostomy for Chronic Malignant Disease of the Stomach.

Barker, of London, and Dalziel, of Glasgow, each publish a series of cases of the above in the *Lancet* of August 23, 1902. Barker's series of ten cases includes only those cases of non-malignant chronic inflammatory disease of the stomach and duodenum on which he had operated during the preceding 12 months; and the series is consecutive. Four of the patients were males and six females. The ages ranged from 44 to 56, the average being about 45. Most of the patients suffered from pyloric stenosis due to gastric ulcer. They were all more or less emaciated before operation; they all recovered and gained flesh rapidly. All the cases of stenosis began with the usual symptoms of dyspepsia—i.e., discomfort or pain after food, followed sooner or later by vomiting of undigested matter and usually by more or less bleeding. They had all been subjected to a long course of treatment by dieting and lavage, with benefit for a time, but in all the cases a return of the symptoms occurred on resumption of ordinary dietary. Lavage, although a very valuable means in the treatment of affections of the stomach, can only be considered as palliative when a chronic ulcer is causing stenosis. Dilatation was present in most of the cases. This was estimated by percussion in the first place, and afterwards by filling the stomach with water, and by inflation with air. The routine preparation for the operation was the cleansing of the stomach for several days by washing, and the administration of only small quantities of sterile food. The mouth was at the same time cleansed, and carious teeth extracted. (Thus the author considers very important.) Ten grains of carbonate of bismuth were given three times daily as an intestinal antiseptic. The lower bowel was washed out with enemata. Where great emaciation existed, a pint of normal saline solution, containing five per cent. of glucose, was injected under the skin night and morning. Nutrient enemata were also given for days before. The operation done in all these cases was the retro-colic one (von Hacker), without Murphy's button or other mechanical appliance. The suturing was done as in the author's first case, 15 years ago, viz., by uniting the serous and muscular coats behind the proposed opening, before the latter was made, and then by opening the gut and stomach, and uniting the resulting edges and finishing the continuous suture over the front, which had been begun before the viscera had been opened. He had no idea when he published this method 15 years ago that it would become the classical one. The abdominal incision was closed in all the cases except one with sutures, including all the layers with the skin. As regards after-treatment, while on the operating table, if there were any signs of shock the patient received in the areolar tissue of the arm near the axilla a pint of the saccharo-saline solution. At first the patients were kept on their backs, slightly inclined to the right side. After a day or two they were kept in a semi-recumbent position while awake. They were all fed from the first by the mouth as well as by the rectum. As soon as the chloroform nausea had passed off they were allowed half an ounce of albumen water, with a drachm of brandy every hour or two, and on the fifth day were allowed Benger's food, pounded fish or chicken. In the cases where the regurgitation of bile has been a troublesome symptom, the introduction of a rubber tube into the stomach has been attended by relief. As before mentioned, all ten patients recovered,

and the change in health was very remarkable. The patients lost all their old symptoms.

It is quite clear that in cases of non-malignant stomach disease the formation of a short cut between the fundus of the stomach and the upper part of the jejunum offers a very good prospect of complete relief, and with a very moderate risk.

Dalziel's series consists of 30 cases. These operations were undertaken for the cure of apparently incurable dyspepsia, many of them with evidence of marked pyloric obstruction. The patients had been under treatment for periods varying from two to 17 years, 16 of them with definite history of ulceration. At the operation well marked contraction of the pyloric orifice was found in 18 cases. Many of these patients were in a state of great emaciation from prolonged malnutrition. The symptoms presented were varied, as was also the amount of dilatation. In all the misery and suffering were sufficiently great to render the patients willing to run the risk of the operation with prospects of relief. In almost all the cases pain was a prominent symptom. As a preliminary to operation, careful lavage of the stomach was carried out in all cases for two days before the operation, plain water being used. The incision was made above the umbilicus, in the earlier cases through the middle line, but later through the middle of the left rectus muscle. With the exception of four cases all the operations have been that of posterior gastro-enterostomy. The usual method of operation has been to withdraw and turn up the omentum and colon, guarding these with large, flat, natural sponges wrung out of sterilised saline solution. The posterior wall of the lesser peritoneal bag is opened with a cut from the scissors, and this wound is stretched sufficiently to allow a portion of the stomach, preferably near the junction of the pyloric with the middle third, to be drawn through, so that the opening may be situated high up—that is, towards the lesser curvature. A loop of jejunum, readily found by looking for the termination of the duodenum, is then withdrawn and approximated to the selected portion of the stomach and fixed to it by means of hook forceps about two and a half inches apart, so that ample room may be left for the stitching. In all cases three rows of continuous sutures were inserted: the first, that to be furthest from the opening, being of silk; the second, of catgut, which may absorb in from four to six days; and the third, next to the lumen of the canal, of fine intestinal silk—the idea of the intervening catgut being to secure a zone of adhesions without the prolonged presence of a foreign body, so that the outer retaining suture may be less easily contaminated by sepsis from the necessarily exposed wound of the mucous membrane. After the first two rows of sutures have been inserted half-way round that point where the opening is to be made, they are carefully guarded with sterilised gauze and the jejunum is opened in its long axis, opposite to the attachment of the mesentery, and a corresponding opening is made in the long axis of the stomach. These openings have generally been about two inches in length. All bleeding points are carefully ligatured, and while this is being done plugs of gauze are inserted into both openings to prevent escape of contents, which for the most part consist of mucus and bile. Finally, the third row of sutures, including all the coats, is inserted quite close to the gut wound, and thereafter the second and first rows are carried round to where they started. The opening in the omentum is then carefully adjusted round the anastomosis and the parts are returned to the abdomen; the abdominal wound being closed in the usual way, preferably by suturing in layers, and in addition by a number of sutures transfixing the entire thickness of the abdominal wall.

As regards the immediate after-effects of the operation, in no case was there shock of any consequence, and the temperature rarely rose to 100 deg. F. Sickness, persisting for some days, was noted as occurring more frequently in women, and in only two cases did the bilious vomiting persist beyond the third day. A double anastomosis, as performed by Mikulicz, was performed in one case, but the result was not encouraging. The patients were allowed barley water as soon as the sickness of anaesthesia had passed off, and chicken tea and diluted peptonised milk as soon as they were inclined for it. Light puddings and pounded meat were allowed at the end of eight or ten days. One of the cases proved fatal from shock through the protrusion of two coils of intestine between the edges of the abdominal incision on the fourth day. This case is fully reported. As to the ultimate result, sufficient time has not yet elapsed to speak with any authority, but nearly all of them appear to have benefited greatly, and 18 of them state that they are as well as ever they were in their lives. One patient increased from 5 st. 11 lb. to 11 st. within a year after operation. The author expresses his belief "that in this operation we have a means of relieving a vast amount of suffering, and, what is of equal importance, of returning to the body politic many useful and valuable lives otherwise doomed to suffering and misery, and this with an amount of risk to life much less than is daily undertaken for less serious ailments."

The Ilio-psoas Bursa and its Surgical Importance.

Lund (*Boston Medical and Surgical Journal*, September 25th, 1902) records three cases of inflammation of the ilio-psoas bursa, simulating suppuration of the hip-joint, which have come under his own notice, although this bursa receives scant attention from anatomists and surgeons, if one may judge by ordinary surgical text-books. In one of the cases a diagnosis of strangulated femoral hernia had been made. The author quotes from Tillaux's description, which he says is the best he has seen of this bursa, which lies between the ilio-psoas muscle and the anterior surface of the hip-joint. It is large, runs a certain distance above the ilio-pectineal eminence, and often communicates with the capsule of the hip-joint through an opening in the latter. Collections of fluid in this sac give rise to a deep-seated tumour which lifts up the femoral vessels. Pain and tenderness are prominent symptoms, as may be expected from the fact that the anterior crural nerve practically lies in the substance of the muscle. Lund, as the result of the study of his three cases and of the literature on the subject, summarises as follows:—1. The ilio-psoas bursa possesses surgical importance owing to its position and its frequent connection with the hip-joint. It frequently extends above the pelvic brim. 2. It may be involved in osteo-arthritis, gonorrhoeal infection, or suppurative arthritis of the joint, and the symptoms due to the disease of the bursa may dominate the clinical picture. 3. In gonorrhoeal arthritis, incision of the bursa affords an easy method for reaching and draining the joint. 4. In osteo-arthritis, relief of pain is afforded by incising the bursa. 5. The bursa is best reached by a vertical incision just below Poupart's ligament, between the anterior crural nerve and the femoral artery. The ilio-psoas muscle may be drawn inward, or (as is more direct and preferable) the fibres may be separated by blunt dissection in the line of the incision. 6. Where the bursa is connected with the joint a ready diagnosis of the head of the femur and acetabulum may be made by passing the finger through the opening in the bottom of the bursa. 7. Ilio-psoas bursitis should be more often considered in the differential diagnosis of obscure tumours in the groin, and such a diagnosis should be possible in

cases where the hip-joint is known to be diseased and a tumour suddenly appears in front of the joint, under the anterior crural nerve and femoral vessels, which is very painful and tender, and, perhaps, gives to the palpating finger a sense of deep fluctuation.

A Modification of the Barker Method for the Treatment of Fractures of the Patella.

Williams (*Philadelphia Medical Journal*, October 4, 1902) describes a slight modification of Barker's method of wiring a fractured patella. He prefers the subcutaneous method to the open one for the following reasons:—(1) It is more easily and quickly performed; (2) the occurrence of superficial or even deep suppuration, ankylosis, sepsis and even amputation, as is sometimes the result of the open incision, is reduced to a minimum; (3) the recovery is more rapid and certain. Practically the only difference proposed is the use of a double wire instead of a single one, which enables a Staffordshire knot to be tied. The needle is introduced either from above downwards, or from below upwards if the knot is to be tied above. The needle is passed behind the patella and brought out at the opposite incision from where it entered. It is then threaded double, and the two ends of the ligature are held out of the wound while the needle is withdrawn enough to bring it with the loop just beyond the opposite side of the fragments of the patella; then, without withdrawing it from the wound, it is passed above the fragments and brought out through the incision at its first point of exit. The loop is then unthreaded from the eye of the needle and the needle withdrawn; in this manner the ligature is doubled around the fragments, and by not completely withdrawing the needle before it is passed above the patella it prevents the skin or subcutaneous tissue from being caught in the ligature, as is apt to be the case in the Barker method. After the needle is withdrawn, one end of the ligature is passed through the loop, and after pulling both ends tightly, they are tied firmly, thus making what is known as the Staffordshire knot. The ends of the ligature are cut off and the small incisions above and below the patella are closed with one or two catgut sutures, the parts dressed antiseptically, and the limb put up in anterior and posterior splints. The paper is fully illustrated.

THERAPEUTICS.

Treatment of Typhoid Fever in Children.

Hand and Walker (*American Journal of the Medical Sciences*, June, 1902) detail the routine treatment of cases of typhoid fever occurring in children at the Philadelphia Children's Hospital. The patients are kept in bed on a liquid diet. Using the temperature as an indication of the degree of toxæmia, an endeavour is made to combat the effect of the toxin and secure its elimination by hydrotherapy. In the majority of cases a tub bath is used, the temperature of the water being 75° F. A cloth rung out of ice water is put on the head, and the body immersed in the bath. The duration of the bath is from five to ten minutes, the influence on the temperature and the pulse being used as a guide. While in the bath the surface of the body is gently rubbed by the nurse. Among younger children the tub bath is not well borne; in these cases sponging with water of the same or higher temperature is used, but sponge baths often failed to influence the temperature sufficiently. As an additional means of elimination the authors use drachm doses of a solution of citrate of potash well diluted with water with the idea of protecting the kidneys from the poison as it was being excreted. Where diarrhoea is present bismuth salicylate in doses

of three grains every three hours, combined with bismuth subnitrate in the same doses, is used, apparently with success. Whisky is given in almost every case in doses of from 30 drops to one or two drachms diluted with milk every three hours. Strychnine is occasionally used as a heart tonic. If the patient be admitted before the eighth day of the disease, small doses of calomel are given until one grain has been taken; afterwards the constipation is overcome by enemata. If the tongue be heavily coated, turpentine in five drop doses is given. Liquid diet is continued for ten days after defervescence is established, the first addition to the diet being usually milk toast.

Ichthyol in Rheumatism.

Post (*Therapeutic Gazette*, September, 1902) records his experience of the use of ichthyol in two cases of rheumatism. The first was one of acute articular rheumatism in which both knee joints were swollen, tender and painful. Salicylate of soda in doses of ten grains every three hours was prescribed. A coating of pure ichthyol was painted over the affected joints, and they were then covered with cotton wool and oiled silk. The pain, tenderness, swelling and local fever were all appreciably diminished before the constitutional treatment had time to produce its beneficial effect, and the patient was thus saved considerable pain and discomfort. The second case was one of chronic rheumatism in the hip joints, which had lasted for three years, following upon an acute attack, in a woman of 56 years of age. All efforts to relieve her proved unavailing, the symptoms remaining in *statu quo*. A saline laxative was prescribed in small daily doses; an ointment of ichthyol (50 per cent.) was ordered to be rubbed into the skin over the region of the trochanters morning and night. Ichthyol and glycerine, of each two drachms, peppermint water, one ounce, was prescribed, given in doses of 20 drops in water three times a day after meals. Slight improvement was noted in ten days, and it continued steadily. The vigorous rubbing given when the ichthyol ointment was applied caused no pain. The ichthyol given internally caused some gaseous eructations, but was attended with no other disagreeable consequences.

Treatment of Oxaluria.

Rosin (*Die Therapie der Gegenwart*, July, 1902) states that the rational treatment of oxaluria depends on the fulfilment of the conditions required for securing the solubility of oxalate of lime in the urine. According to Klemperer, oxalate of lime is most soluble when the urine is strongly acid, and when it contains but little lime and much magnesia. The diet must therefore be regulated so that this state of the urine may be initiated and retained. Articles of diet which are known to contain oxalic acid, such as green vegetables, especially spinach and cabbage, must be avoided; tea and coffee should also be forbidden. Milk and eggs are not permissible, but farinaceous foods, rice, peas and beans may be taken, also apples and pears. Meat which contains but little oxalic acid may be taken. In order to increase the magnesia in the urine, small doses of magnesia salts should be ordered. This line of treatment should be adopted to prevent the possibility of the formation of an oxalate calculus in either the kidney or bladder.

A New System of Treatment in Pulmonary Phthisis.

Duncan Turner (*Lancet*, October 18th, 1902) having been convinced of the utility of electricity and massage in restoring tone to the system, and improving nutrition generally, and having observed the good effects of inunction of cod liver oil in cases of children suffering

from tuberculosis of the bowel, determined to try the effect on adults of the use of electricity and massage with cod liver oil mixed with other remedies employed in the treatment of phthisis, such as creosote and guaiacol, which are found by many persons to be nauseous and productive of indigestion. He uses for inunction a combination of four drachms of creosote or guaiacol, one drachm of oil of citronelle, and cod liver oil to make up to four ounces; the oil of citronelle is only added to disguise the smell of the creosote and the cod liver oil. The following is the method of procedure:—The patient, after being hardened by repeated cold spongings for two or three days, lies on a couch, all clothing being removed, then the body is sponged with a weak solution of bicarbonate of soda (one drachm to a pint), and dried with a soft towel. The oil mixture is then rubbed in all over the trunk from the neck to the pelvis, back and front, the quantity used at a time being from one to two tablespoonfuls according to size and age. The process occupies a quarter of an hour, and its efficacy depends on the vigour of the operator; if only carelessly smeared on, very little benefit will ensue. Over the abdomen some kneading is done in addition to the rubbing. The author does not speak confidently of the use of galvanism along with the oil massage. The disadvantages of the treatment are the unpleasant odour and the amount of labour connected with it. Its advantages are many, including immediate relief of symptoms. If the patient be feverish the temperature generally falls a degree or more after every rubbing, the cough is easier, the appetite improves, and the night sweats cease; there is a general feeling of well-being, and the improvement in the lung goes on *pari passu* with the gain in weight. The author advocates the use of oil massage as an adjunct to sanatorium treatment; but where the patient is unable to obtain sanatorium treatment, or is unable to leave off his work, pure olive oil may be substituted for the creosote cod liver oil mixture, though it is not so efficacious as the latter. The author specially claims for oil massage that it materially shortens the time of treatment. It is not recommended in advanced cases, or where there is a proneness to hæmorrhage. In children the results are better than in adults. Dr. Turner gives statistics showing the beneficial results of this treatment at the Mount Macedon Sanatorium in Victoria. During the season 1898-99, 24 patients gained 68 lb. in weight under the old treatment; while during the season 1899-1900, 24 patients gained 206 lb. in weight under the oil massage treatment during their stay at the sanatorium.

DISEASES OF THE EAR, NOSE AND THROAT.

The Nasal Treatment of Asthma.

Francis, of Brisbane (*Lancet*, October 18th), states that while most rhinologists have faith in the local nasal treatment of asthma where obvious trouble exists, none have suggested the advisability of treating the nose in cases of asthma when the organ is apparently normal. He believes, however, that these are the cases in which the most hopeful prognosis can be given. Of the 402 cases recorded, 346 had no apparent nasal lesion; and of these, 8 only obtained no relief from nasal treatment, while 6 cases were unrelieved by treatment among 56 which had polypi or other gross nasal lesions. He comes to the following conclusions:—

1. That asthma is due to reflex spasm of the bronchial tubes.
2. That the irritation may originate in the nose. This was inferred from the intimate association between hay fever and asthma, and from the immediate onset of asthma which occurs sometimes after certain injuries to the nose.

3. Asthma is not directly due to any mechanical obstruction of the nasal passages, and is not commonly caused by any gross nasal lesion. The association of asthma and polypi is not so common as is generally supposed.

When they occur together he believes they are more probably the result of some common factor than that they have any direct causal relationship. The best results in cases of polypi have been obtained by cauterising the septum without touching the polypi, whereas in some cases complete eradication of the polypi intensifies the asthmatic conditions. In other cases where nasal obstruction from engorged turbinates and asthma occur together, the difficulty of breathing through the nose and the dyspnoea are unrelieved by rendering the nasal passages mechanically free, but are both instantly relieved on applying cocaine to the septum.

4. That some part of the nasal apparatus has a controlling influence upon the respiratory centre.

He records numerous cases, some of many years' standing and great severity, where cauterisation of the septum removed all signs of asthma in patients where the exciting irritation was apparently gastric, cardiac, or bronchial in origin. He does not think the particular kind of asthma affects the value of the treatment. He relates instances in which the relief was confined to the lung on the same side of the body as the cauterisation.

Choice of an Anæsthetic for Short Operations upon the Throat and Nose.

Chaldecott (*Lancet*, September 13th, 1902) states that the anæsthetic used in every recorded fatality for tonsillectomy and the removal of adenoids has been chloroform or some mixture containing chloroform. He has collected a list of more than 50 recorded deaths under chloroform given for this operation in children and adults. In some of the cases the chloroform was given by a specialist in anæsthetics. Death occurred at all stages of the operation. This list lays no claim to being exhaustive, and could probably be largely increased. He deduces from this that this operation, which ought to be and is in itself absolutely free from immediate danger, is perverted by the use of chloroform into one of the most immediately deadly of any in the long list of surgical operations. He believes that in the majority of cases death is due to an overdose of chloroform, and that it is almost impossible to guard against this danger. He strongly recommends either nitrous oxide or ether, advising ether on an open mask for infants below one year. He states that in an enormous experience as an anæsthetist to two London throat hospitals he never saw dangerous hæmorrhage caused by the administration of ether.

Treatment of Chronic Catarrhal Otitis Media by Super-heated Compressed Air.

Hopkins (*Annals of Otology*) has treated 62 persons (all elderly) by this method, and has had only four absolute failures. Some of the cases had extensive labyrinthine involvement. The ear selected for treatment is first cleaned and dried. A light pad of gauze is pressed by an ear speculum deeply into the ear; the heater, of which a description is given, is then started. He recommends a 10 or 15 minute sitting, increasing the temperature gradually till the limit of toleration is reached. Treatments are given three times a week for from three to twelve months. It is well to practise Eustachian inflation, and vibratory massage from the nebuliser, after each hot-air treatment, being particular that the vapour is warm.

Dangers of Curettement of Middle Ear Granulations.

Tod and Prince (*Laryngoscope*, October, 1902) relate two cases in which untoward results followed curetting the ear. The first case was that of a young man with granulations round the edge of the drum. Under cocaine the granulations were curetted and the incus removed. There was deafness next day. In three or four days he became giddy, but his appetite and his temperature was 100 deg., which rose two days later with a rigor to 104.4 deg.

Though there was no mastoid tenderness, the radical operation was performed, and the antrum found full of pus and granulation tissues. Two days later the lateral sinus was opened, the jugular ligated, and pus found extending back from the sigmoid sinus. Patient recovered.

The second case was that of a child with a polypus in the middle ear. The polypus was curetted, and about two days afterwards the child developed meningitis and a few days later died.

Energetic curetting is to be deprecated, as the protecting membrane near the lateral sinus should not be disturbed. It is also necessary to use thorough antiseptic and aseptic precautions.

Scarlatinal Perforations of the Pillars of the Fauces.

Hubbard (*Laryngoscope*, October, 1902), in an article on this subject, arrives at the following conclusions:—Special text-books and syphilographers do not give due credit to scarlatinal angina as a cause of defects and cicatrices of the faucial pillars. A deep focus of streptococcal infection, tonsillar or sub-tonsillar, causing necrosis of all contiguous tissue rather than pus accumulations, as in ordinary peritonsillitis, is the cause of perforation of anterior and posterior faucial pillars. The pharyngo-maxillary space is the probable location of this focus of necrosis. Scarlatinal ulceration is usually bi-lateral, and being often very insidious, and marked by other severe systemic symptoms, the lesion is very frequently overlooked. The treatment of scarlatinal angina must be conducted with extreme surgical thoroughness and patient persistence. Bi-lateral distinctive otitis is a common complication of scarlatinal angina, since the dysphagia caused by throat infiltrations allows regurgitation of fluids and infecting material into the nasopharynx, and only by prompt healing of the throat can the hearing be saved.

A medical man, writing in the *Daily Mail*, says:—“If I were giving advice to a young man just qualified in medicine, I would hesitate before advising him to choose the country as his field of practice. In no other walk of life, perhaps, do you feel more sensibly the truth fortuitously expressed by Alphonse Daudet's egregious D'Argenton, that life is not a romance. It may be very beautiful in theory to turn out of bed on a frosty night to relieve suffering, but in practice it is very, very cold work, at least in a country practice. Then the squabbles and the bickerings and the petty hatreds that flourish in villages—villages that look so peaceful in the grey twilight of an October evening or the early dawn of a summer's morning. No, the medical profession is not a bed of roses—in the country; the same old patients, the same old roads, the same old horse to drive, and the same old monotony, drive many a man to the same old destruction—drink. Yet if you have a well-balanced nervous system and a peaceable wife you may pull through, *consilio et amicis*—and with the help of your pipe.”

CORRESPONDENCE.

London.

(FROM OUR OWN CORRESPONDENT.)

Coronation Gift to the King—British Association for the Advancement of Science—Re-opening of the Medical Schools—The Harveian Oration—International Congress of Medical Electology and Radiology.

On August the 11th the Right Hon. Sir Joseph Dimsdale, Bart., M.P., Lord Mayor of London, Viscount Duncannon, C.V.O., C.B., and Sir Saville Crossley, Bart., M.P., M.V.O., waited upon the King and presented him with a Coronation gift of £115,000, subscribed by all classes of his Majesty's subjects. The King was pleased to accept the gift, and expressed in sympathetic terms the pleasure he experienced in the fact that this munificent tribute embraced the offerings of the poorer classes of his subjects as well as those of the richer. His Majesty then handed his people's gift to his Royal Highness the Prince of Wales, and requested him to apply it to the augmentation of King Edward's Hospital Fund. This fund was originated by the King—then Prince of Wales—in celebration of the Diamond Jubilee of her late Majesty Queen Victoria, with the object of freeing the London hospitals from debt, and this substantial contribution is not only a most gracious act, but also an eloquent testimony to the sustained interest which his Majesty takes in the success of a scheme which, ever since its inception, he has had closely at heart.

This year's meeting of the British Association took place in Belfast, and lasted from September the 10th to the 17th, under the presidency of Professor J. Dewar. It was, when compared with the last Belfast meeting of the Association in 1874, comparatively tame. No new discoveries were announced, and no remarkable addresses were delivered, such as those of Tyndall, Huxley and Hooker on that occasion. There was a lack of enthusiasm in the proceedings, and the attendance was small. The work was carried on in 11 sections, one of the best being that of "Education," where a lively discussion ensued on an address given by Dr. Starkie, one of the University Commissioners, on "Irish Primary Education."

A paper contributed by Dr. Graham on "The Mental and Moral Characteristics of the People of Ulster" attracted considerable attention; and able papers were read by Professor Halliburton on "The Present Position of Chemical Physiology"; by Professor Schafer on "The Diuretic Action of Pituitary Extracts"; and by Dr. Turner on "Some New Features in the Intimate Structure of the Human Cerebral Cortex."

The winter session of the London and Provincial Schools of Medicine was, as usual, entered upon on the 1st October. Despite the outcry against the uselessness of introductory addresses, many were delivered, some excellent, others indifferent, and the greater number more or less charged with ponderous and familiar precepts. Among the more notable, all of which will repay perusal and consideration, may be mentioned those of Dr. Whipple, Sir Dyce Duckworth, Sir Henry Howse, and Mr. Mayo Robson. Dr. Whipple spoke at St. George's Hospital, and chose as his text an aphorism of Sir William Gull that "in medicine we make more mistakes by not looking than by not knowing." He pointed out that the faculty of looking is

not bestowed upon everyone in equal degree, but that the power is innate in all and capable of cultivation. He recalled the well-known advice, often given to his pupils by the late Sir George Murray Humphry, of Cambridge, "Eyes first, then hands, tongues last and least," and elaborated an interesting and classical sermon on the importance of accurate observation. At Queen's College, Manchester, Sir Dyce Duckworth followed on much the same lines, urging the desirability of retaining a full preliminary training in the *litteræ humaniores* as the best and most efficient of all methods whereby the mental balance and acumen necessary for the development of the faculty of accurate observation might be secured. He called upon his audience to distinguish between the knowledge necessary for daily work which we carry about in our heads and that which is not so much a daily necessity, but which we should always know where to find when it is required. He counselled his hearers to cultivate both, and to add thereto wisdom, which alone would enable them to penetrate into the real inwardness of things and form a correct judgment in any matter which was brought under their consideration. Sir Henry Howse, speaking at the Sheffield Medical School, devoted the greater part of his address to the relation of medicine to religion. He pointed out that natural law is the voice of Deity, "proclaimed in no uncertain sound, not handed down by tradition or written in books to whose authenticity critics may take exception, but carried out with that exact regularity with which all must live in conformity, if they wish to live at all." The study of the laws of nature provided, he said, to the scientific man a solution of all the difficulties connected with the acceptance of religion and the harmonising of it with science, and it was not unreasonable to look forward to the time when moral laws would be evolved, by which the rules of conduct would be judged and guided with no less certainty and accuracy than the movements of the heavenly bodies were now calculated by the great physical law of gravitation. As yet, moral laws were unformulated, or at least imperfectly defined, but their highest exposition was to be found in the Christian law, between which and the laws controlling disease there existed such a close connection that violation of the one constituted an offence against the other. He advised those on the threshold of the profession to retire and find some other more congenial occupation if the study of chemistry, physics, or biology failed to awaken their active interest in the great laws of Nature to which he had referred; and in the course of his address he struck the same note as Sir Dyce Duckworth in regard to the superlative value of preliminary education, of which he thought Latin and Greek ought still to remain compulsory subjects.

Mr. Mayo Robson, speaking at the Yorkshire College, Leeds, reviewed the progress of surgery during the past 30 years, which comprised the period of his own active professional life. He adduced striking evidence of the good work which has been done and the advance which is being made in all branches of the profession, and held out to his audience, as an inducement to careful and original research, the certainty that the future has in store still greater discoveries than any yet made for those who are fortunate enough to succeed in penetrating a little deeper into the great secrets of Nature. He advocated the continuance of study at post-graduate schools both at home and abroad, after the university curriculum was finished, as one of the most necessary and useful means whereby knowledge might be profitably increased, a wider view of professional life acquired, and the young practitioner become best equipped for the problems and duties of his future life-work.

Besides the various introductory lectures delivered at the Medical Schools, London medical audiences were privileged during the early days of October to listen to striking addresses from two leading men of other countries. Professor Erb (of Heidelberg) inaugurated the winter session of the West London Post-Graduate College by an oration on "Spastic and Syphilitic Spinal Paralysis," and the Charing Cross Hospital had its fourth Huxley Lecture delivered by Professor Welch, of the Johns Hopkins University, Baltimore, who chose as his subject "Recent Studies of Immunity with special reference to their bearing on Pathology." Needless to say, both lectures were masterpieces, deeply interesting not only to those who listened to them, but also to that vastly wider audience by whom they will be eagerly read. The custom which is becoming established of having distinguished foreigners from time to time among us is a step in the right direction, which cannot fail to stimulate our work at home, and promote that increase of knowledge which is the common goal of scientific endeavour wherever carried on.

The Harveian oration was delivered at the Royal College of Physicians on Saturday, October 20th, by Dr. Ferrier, F.R.S., Professor of Neuro-Pathology at King's College. The orator, in his introductory remarks, referred to the gratification felt by the Royal College of Physicians that his Majesty had been restored to health to reign as the anointed king over a loyal and united nation. His Majesty had been twice delivered from imminent peril to his life by the skilled devotion of his doctors, and on both these occasions he had been fortunate in having as his advisers the greatest living experts on the disease from which he suffered. It was a source of satisfaction to reflect that the art of medicine had so advanced as to have rendered it possible to preserve such a precious life. The profession willingly acknowledged the deep debt of gratitude due to the King for the sympathetic interest he had always taken in its work, and especially for the magnificent endowment he had secured for the metropolitan hospitals. The illustrious Harvey was fortunate in having in Charles I. a sovereign also keenly interested in scientific advancement, and one who provided his trusted physician with many facilities for his observations and researches. It was to the King that Harvey dedicated his immortal treatise, "De Motu Cordis." Harvey had been truly described as the Newton of physiology, and it would be as difficult to explain the laws of health and disease without reference to the circulation of the blood as to explain the movements of the celestial bodies without a comprehension of the great physical law of gravitation. Harvey's monograph was such a complete proof of the system of circulation that nothing of vital importance had been added to the cogency of his logical argument during the 274 years that had elapsed since his views were first published to the world.

In Harvey's time little was known of the relation of the nervous system to the heart, the advances in which branch of knowledge the lecturer traced in detail. He asserted that still fuller light awaited the investigation of many uncertain and hypothetical questions if the steps of the great Master were followed and his injunctions obeyed to "search out nature by way of experiment."

The second Congress of Medical Electrology met at Berne during the first week of September under the presidency of Dr. Dubois. Representatives were present from most European countries, and the meeting proved successful both from the social and scientific points of view.

Summaries dealing with the present state of knowledge on the subject of electro-diagnosis were read by

Drs. Cluzett and Mann, and one morning was entirely devoted to the consideration of a memoir by Oudin on accidents due to the X-rays. A highly practical and interesting discussion followed a paper of Dr. Bacelli on "The Dangers of Industrial Electric Currents." Many new forms of electrical apparatus were exhibited and described. The next Congress will be held in 1905 at Amsterdam.

Victoria.

(FROM OUR OWN CORRESPONDENT.)

The "Drayton Grange" and the Army Medical Services—The Williamstown Hospital—The Charges against Dr. S. Macbriene—Hospital Items.

Now that the story of the "Drayton Grange" is almost finished it would not be out of place to say a few words of commendation to those who deserve it, viz., to the Director General Army Medical Services (Colonel Williams) for his able services in arranging a hospital at Portsea capable of holding 100 or more patients, and fitted with every requisite necessary for the proper and efficient treatment of all cases that might require to be admitted. Trained nurses were in charge of the wards, and Sergeant Main and members of the Ambulance Corps were there in attendance, with Major Germain and Lieutenant Cade, of the Army Medical Service, to supervise and treat the patients. All this was arranged within 48 hours, and everything was so up to date that it evoked universal admiration from those who had the privilege of going over the hospital prior to the arrival of the "Drayton Grange."

A word of praise should also be given to Lieutenant-Colonel Embling for the quick, efficient and careful transport of 75 patients from the "Drayton Grange" into tugs and then to the Portsea Hospital. These patients had to be slung over the side in hammocks into the tugs below and then conveyed to shore, and all this was done under three hours. Lieutenant-Colonel Embling was assisted by Captain Mullins (N.S.W. P.M.O.), Captain Bryant and Captain King Scott; and he also received valuable help from Captain Fullarton, one of the medical officers on board the "Drayton Grange." So far, not one word of thanks or commendation has been received for what, no doubt, was the biggest transhipment of invalids that has ever been accomplished in this State; and the whole affair was brought to a successful issue without a single hitch, although performed under the most difficult conditions owing to the want of room and the overcrowding of the transport.

The Council of the British Medical Association in this State have very strong views about the representation of the medical staff of a hospital upon the committee of that hospital. One of the rules of the Williamstown Hospital seemed to be framed specially to prevent this, and a resolution was proposed and seconded that the Secretary should write and express the views of the Council on this point to the Williamstown Hospital. The resolution ran as follows:—"The Council of the British Medical Association (Victorian Branch) wish to express their disapproval of Section V (b) of the by-laws of the Williamstown Hospital, and they consider that the medical staff should always be represented on the committee of any hospital with which they are connected, and that it is always detrimental to the best interests of that hospital if they are not so represented. Many unfortunate disagreements between the committee and the medical staff might be avoided, and the relations between the committee and the medical staff must be

more harmonious, when free discussion can take place between the parties most interested in the proper working of the hospital concerned."

This is a step in the right direction, and, no doubt, if the medical staff of the Women's Hospital had been represented on the committee before, a great deal of the misunderstandings which afterwards arose might have been avoided. This system of medical representation has been adopted at many of the hospitals in England, and has been found to work splendidly; and it is to be hoped that the same system may be adopted in these States.

The board appointed under the Public Service Act to inquire into charges against Dr. Stuart Macbairnie (a medical officer of the Metropolitan Lunatic Asylums) have found that these charges have not been proved by the evidence brought forward; and so ends this great storm in a teapot, and Dr. Macbairnie returns to duty at the Yarra Bend Asylum.

At the Women's Hospital the management has quietly settled down to try and bring their finances into an economic condition and to check the increasing expenditure of late years.

The Fever Hospital still drags its wearied existence along, and, as I mentioned in a former letter, it may be ready to receive patients about the time of the millennium.

INVERSION OF THE UTERUS.

(To the Editor of the Australasian Medical Gazette.)

Sir,—Dr. Jamieson, in his evidence in the recent fatal "faith-healing case" at Ashfield, said that according to the records of the Rotunda Hospital, inversion of the uterus only occurred once in one hundred and ninety thousand cases. I may, therefore, be excused in calling attention to a case which occurred in my practice many years ago, and which is recorded in the *British Medical Journal*, March 1st, 1879, p. 325.

Yours, etc.,

G. H. MACSWINNEY.

Chatswood, December 9th, 1902.

THE BATTLE OF THE CLUBS.

New South Wales.

WE have been favoured with a copy of an agreement formulated by the Good Intent Lodge No. 51, M.U. I.O.O.F., North Sydney, for signature by their medical officer. We have no hesitation in characterising this as one of the most one-sided, unfair and arbitrary agreements ever presented by a lodge to a medical man; and we further state that any medical man who would undertake to sign it in its present form has lost all sense of respect for himself and for his profession, and the sooner he betakes himself to some other walk in life the better.

Here are some of the "plums" in the document:—

"The medical officer shall hold office during the pleasure of the Lodge, who shall have power to dismiss him at any time, upon notice in writing, for breach of the medical rules, or neglect of duty, which shall have been proved to the satisfaction of the Lodge, and such dismissed officer shall only be entitled to receive payment due up to the end of the month of such dismissal; and he shall furthermore pay all reasonable expenses that may have been incurred by reason of his neglect, such expenses to be deducted from any moneys due to him by the Lodge, or recovered by legal process. Provided that the officers of the Lodge shall at any time have full

power to suspend from duty the medical officer until his conduct shall have been brought before the Lodge, and he shall not be entitled to any payments from the date of suspension unless the Lodge thinks fit to pay the same."

"When any charge has been made against the said medical officer for neglect of duty and proven to the satisfaction of the Lodge, and which in the opinion of the said Lodge can be met with a fine, the Lodge shall have power to inflict such fine as it may deem fit. Should any fine so inflicted be not paid within two weeks of notification by the secretary, the officers of the Lodge shall have power to dismiss such officer in the same manner as provided by rule 3."

"Should the medical officer desire to resign his position he shall give the secretary of the Lodge three months' notice in writing thereof, or forfeit three months' pay."

Under these rules the Lodge assumes the right of instant dismissal of the medical officer, but the medical officer must give three months' notice of intended resignation. Fancy a medical man submitting to be fined for supposed neglect of duty, and then to be dismissed if the fine be not paid! The thing is monstrous. This is the humiliating treatment meted out to any poor medical man who seeks the honour of being the medical officer to the "Good Intent" Lodge.

"The medical officer shall attend all the members, their wives and children, or adopted children, under 18 years of age, etc."

It is recognised as a fair thing that the children of lodge members should be attended up to the age of 16 years; but the "Good Intent," with very bad intent, presume to raise this age to 18.

"In the case of patients unable to attend at the medical officer's rooms, and residing beyond three miles from the lodge room, the medical officer is to be allowed three shillings for every mile or part of a mile, one way only, for each visit."

In the case of lodge members residing outside the three-mile limit, full fees should be paid to the medical officer, and we understand this has been the custom in this Lodge in the past. But this is the time (so the Lodge thinks) to sweat their medical officer, and offer him payment at the rate of one shilling and sixpence per mile, no matter where the member resides, whether it be a hundred miles or only one beyond the limit.

"In cases where surgical operations are deemed necessary by the medical officer, he shall, if desired, perform such operations, or act in harmony with any other medical gentleman retained by the patient. The patients shall have the option of calling in at their own expense any legally qualified medical practitioner they may choose for consultation with the medical officer of this Lodge."

"Members requiring certificates for the satisfaction of their employers shall be furnished with the same by the medical officer, without any charge whatever, and whenever required."

One would think from reading this document that the Lodge was dictating rules for a schoolboy, but we find in this clause that they actually condescend to speak of the medical officer as a gentleman! We may tell this Lodge at once that if they mean to enforce this clause they will not succeed in securing the services of any member of the New South Wales Branch of the British Medical Association. No member of this Association will be browbeaten by any lodge into meeting in consultation any medical man who considers his pocket before his profession and the goodwill of his fellow-practitioners.

The most painful aspect of this agreement, in our opinion, is the want of confidence shown in the medical officer. How is it possible under conditions like these for doctor or patient to respect one another, or to stand in that relation of mutual regard and esteem which is essential for the satisfactory treatment of his

patients by the doctor. We sincerely hope that this Lodge will withdraw this agreement and substitute one more in harmony with the views of the medical profession. If, however, they persist in their attitude of hostility, then they must take the consequences of their action, and the profession will have to seriously consider whether it is worth their while to continue to attend lodges at all under the present conditions.

Queensland.

A correspondent has forwarded to us the following extracts from the medical rules imposed on their medical officer by the H.A.C.B. Society in Queensland. It will be seen that precisely the same objections must be urged against this agreement. Truly the medical profession in Australasia must have sunk very low in its own estimation if tactics of this sort are calmly submitted to by medical men. It is time that the profession grew some backbone instead of cartilage! The A.N.A. in New South Wales did not get it all their own way, as they fully expected to do, and we hope the profession in Queensland will take the same determined stand against the encroachments of this hydra-headed monster:—

H.A.C.B. Society, Queensland.

DUTY OF MEDICAL ATTENDANT.—*To examine candidates for initiation, and wives if married; attend members, their wives and families, or members of any registered friendly society—males under 18 years of age and females whilst dependent on their parents for support. In the event of a member's parents living with and depending on him for subsistence, the medical attendant shall attend the same, and the medicines required shall be provided as in the case of a member. Widows and children may receive medical attendance. Provided the widow of a member does not marry again, she may, by paying quarterly in advance such sum as the branch may from time to time decide, receive medical attendance and medicine for herself and children.*

Guardians of orphan children of members shall be entitled to medical attendance and medicine for them by complying such as widows.

Any honorary or life honorary members requiring the services of medical attendant and medicine shall be entitled to them by paying usual fee as other members, but shall not have any claim or be entitled to sick pay or funeral allowance.

SCALE OF FEES PAYABLE TO MEDICAL PRACTITIONERS IN NEW SOUTH WALES.

We would direct the special attention of our readers in New South Wales to the following regulations governing the payment of fees to legally qualified medical practitioners for services rendered on behalf of the Government on request, as announced in the *Government Gazette* of November 14th, 1902, taking effect from that date in lieu of those dated May 6th, 1899:—

GENERAL REGULATIONS.

A. All claims shall be furnished at the end of the month during which the service was rendered.

B. No claim shall be passed for payment unless the voucher for it is duly signed by an officer authorised to incur the expense.

C. When the hearing of a lunacy case is adjourned, the voucher shall show whether it was adjourned for further medical observation or for medical treatment.

D. A post-mortem examination shall not be deemed to have been made unless all three cavities of the body have been opened and examined.

E. Fees for exceptional services shall be fixed by the Chief Medical Officer, in view of the following regulations in as far as they apply:—

SPECIAL REGULATIONS.

I. Day-visits.—A fee of ten shillings shall be allowed for a visit paid to a patient at a lookup, or at any other place within one mile of the medical practitioner's residence, between the hours of 5 a.m. and 10 p.m.; this fee shall include supply of all necessary medicines, dressings, and tooth extraction, etc.

II. Night-visits.—For any service rendered between the hours of 10 p.m. and 5 a.m. one extra fee of ten shillings shall be paid in addition to the fee prescribed for the service or services.

III. Evidence in Court.—The fee for examination, together with issue of certificates and giving of evidence in court, shall be one guinea, whether the examination be made on the same day on which the evidence is given or previously.

IV. Two or more cases at one time.—When two or more cases are dealt with at the same time and place, half fees only shall be allowed after the first, save as hereinafter provided.

V. Supplementary Evidence at Adjourned Inquiries.—For supplementary evidence at adjourned inquiries half fees only shall be paid, save as hereinafter provided.

VI. Rape and Criminal Assault.—In cases of rape and criminal assault the fee for examination shall be one guinea for each person examined, in addition to a fee of one guinea for giving evidence in court. The full fee of one guinea shall be paid for supplementary evidence given in court at an adjourned inquiry into such cases.

VII. Dead Bodies.—The fee for examination of the body of a person lying dead shall be one guinea, and this shall include report thereon, and the giving of evidence in court concerning it. The full fee of one guinea shall be paid for supplementary evidence given in court at an adjourned inquiry into such cases.

VIII. Midwifery Cases.—The fee for attendance on midwifery cases at a lookup, or at any other place within three miles of the medical practitioner's residence, shall be three guineas; and this fee shall include supply of all necessary medicines, dressings, etc., and attendance on mother and child to the end of the tenth day from delivery. In exceptional cases the Chief Medical Officer of the Government may allow such further fee as in view of the circumstances and of these regulations he may deem just.

IX. Operations and Special Reports.—The fee for operations, and for reports furnished at request of the Chief Medical Officer of the Government on special subjects, shall be fixed in each case by him.

X. Examination for Admission into Public Service.—For medical examinations made at request of the Chief Medical Officer of the Government, and report thereon, of candidates for admission to the public service, a fee of one guinea shall be paid; when more than one examination is required on one requisition half a guinea only shall be paid for each case after the first, whether the several examinations be made at the same time and place or otherwise.

XI. Examination for Retirement from Public Service.—For each examination and written report thereon made at request of the Chief Medical Officer of the Government of civil servants for retirement on the score of ill-health, and for any other special reason, a fee of one guinea shall be paid.

XII. Examination of Destitute Sick.—For examination on requisition by the police of a destitute sick

person destined for a hospital or a benevolent asylum, and issue of a certificate of his fitness to travel thither, a fee of ten shillings shall be paid. But when a subsidised hospital is available the police shall, if possible, take any destitute sick person thereto, and then no fee shall be paid either for his examination before admission or the issue of a certificate of his fitness to travel thence to some other place.

XIII. Mileage.—The following shall be the rates allowed for mileage:—One mile or under from the medical practitioner's residence, nil; over one mile and up to five miles, five shillings a mile; over five miles, for each additional mile, seven shillings a mile. For journeys made, or made in part, by rail, one-fourth only of the above rates shall be paid in respect of the distance so travelled. The above-mentioned rates shall be paid for one way only, and shall cover cost of conveyance and all incidental expenses. The distance actually travelled shall alone be claimed for.

FEEs TO MEDICAL WITNESSES.

In accordance with the provisions of the fourth section of 1 Victoria No. 3 (Medical Witnesses Act), the remuneration allowed to legally qualified medical witnesses at coroners' inquests and magisterial inquiries is as follows:—

For giving evidence	£1 1s
For making post-mortem examination ..	£2 2s
For mileage under 10 miles from residence ..	Nil.
For mileage above 10 miles from residence ..	1s per mile—one way only.

"Where a death shall have happened in any public hospital, gaol, or other public building, no medical officer appointed with salary to attend such hospital, gaol, or building shall be entitled to any remuneration." (Medical Witnesses Act, Section 4.)

Special Mileage to Medical Witnesses.—Where a medical witness has travelled over three miles to the scene of an inquest the coroner may represent the facts to the Chief Medical Officer of the Government, with a view to his being specially remunerated. In every such case the coroner should state the length of time the medical witness was absent from his residence, the means of conveyance employed by him, and the expenses out of pocket he incurred.

OBITUARY.

ALEXANDER KINNEAR MORSON, M.D. (Edin.),
L. et L. and R.C.P., R.C.S. (Edin., 1863),
Sydney.

A much respected and well-known resident of North Sydney, Dr. Alexander Kinnear Morson, died on Saturday, November 15th, at his residence, North Sydney. Dr. Morson received his early medical training at Edinburgh, and in 1863 became a Licentiate of the Royal College of Physicians and Surgeons. He took his M.D. degree the following year. Upon arrival in this country he resided in West Maitland, where he practised for several years. Upon retiring from the work of his profession he became a resident of North Sydney, and associated himself with various benevolent institutions. He was a member of the North Shore Hospital Committee, and was also one of the trustees of the institution. In consequence of ill-health he resigned the latter position a short time ago. The funeral took place in the Presbyterian section of the Gore Hill Cemetery.

EDWIN Z. DAVIES, M.B., B.S. (Melb., 1894),
Stawell, Victoria.

Dr. Edwin Z. Davies died from typhoid fever at Colombo, on November 26th, on his voyage home from England. Deceased, who was 29 years of age, was a native of Stawell, Victoria, and obtaining a scholarship at the State school went to the Church of England Grammar School, from which he matriculated. He won many scholarships, and obtained his medical diploma when only 21 years of age. He practised in New South Wales for five years and afterwards went to England, where he was resident surgeon at Brompton Cancer Hospital, London, for 12 months. He continued his studies and gained the degree of F.R.C.S. He spent the last 12 months in South Africa, attached to one of the English regiments as civil medical officer, and returned to England for his discharge.

ARCHIBALD MEGGET MEGGINSON, M.B., Ch.M.
(Edin., 1878), Sydney.

A well-known figure in medical circles in Sydney has gone in the person of Dr. Archibald Megginson. He had been in bad health for some time, having some heart affection after an attack of rheumatic fever, and he died from this after an illness of two or three weeks on November 15th at the age of 47 years, leaving a widow and one daughter. The deceased gentleman was a son of Dr. Megginson, of Scarborough, England. He studied medicine at the Edinburgh University, and obtained the degrees of Bachelor of Medicine and Master of Surgery in 1878. At the early age of 21 years he was left in charge of a large practice. He came out to Perth some 25 years ago, and was appointed Government medical officer to the prisons. At the invitation of the late Dr. J. Steel he left Perth for New South Wales some five years later. After taking temporary charge of a practice at Merriwa, the late Dr. Megginson came to Sydney. The funeral took place on November 17th at Waverley Cemetery, and amongst those present were Drs. G. Hankins, Palmer, G. A. Marshall, and Murray Will.

JOSEPH JOHN MILLER, M.B., Ch.B. (Melb. 1887),
Brunswick, Victoria.

We regret to record the death of Dr. J. J. Miller, of Brunswick, on November 26th, at the age of 40 years. He partook of some tinned salmon two days before, and the following morning symptoms of acute septic poisoning appeared. He was attended by Dr. Hamilton, of Brunswick, and subsequently Dr. Grant, of Melbourne, and Dr. Dyring, of Coburg, were called in consultation, but he never rallied, and died as above stated. A post-mortem examination made by Dr. Brett, under instructions from Dr. Cole, the coroner, showed that the cause of death was due to liver disease and heart disease, though it was possibly accelerated by ptomaine poisoning, although there was nothing to show that such was the case, as deceased's stomach was practically empty.

The deceased gentleman was a great favourite in the district of Brunswick, being honorary surgeon to the local football and rifle clubs, and also medical officer to several friendly societies. Some eight years ago he represented the Middle Ward in the Brunswick Council, but resigned on the completion of his term of office. Dr. Miller was for a number of years identified with the garrison artillery, and in no quarter is his death so deeply deplored as among his former military comrades. He was buried with military honours on November 28th.

THE CARE OF STATE CHILDREN IN NEW SOUTH WALES.

THE annual report of the president of the State Children Relief Board (Dr. Mackellar, M.L.C.) for the year ending April last states that for the first time in the history of the board—now extending over a period of 21 years—an actual decrease in the number of children provided for apart from their parents is recorded. There are now 3720 children either boarded out, adopted without payment, apprenticed to useful trades or occupations, or placed for treatment in the cottage homes established by the board, as against 3910 in 1901. The greatest diminution occurs in the number who are boarded out, and whose support is directly a charge upon the Government. In 1901 these totalled 2478, while on April 5, 1902, there were only 2208, a decrease of 270. There has been an increase of 79 in the number of children apprenticed, 14 in those classified as boarders without subsidy, and five in the number of infants, for whose maintenance the special rate of 8s per week is paid. The operation of section 16 of the State Children Relief Act of 1901, under which allowances are granted to widows and deserted wives towards the support of their own children, has had the effect of lessening the number of children whose entire support is a charge upon the Government. There has, however, been an increase of only 200 in this division during the year, so that the result of the year's transactions is a decrease of 70 in the number of children wholly or in part supported by the State. This result is in a certain measure due to improvements in the scrutiny and investigation of applications for the admission of children to the board's control, and to careful administration in other directions; but as an annual relative decrease has been apparent in the number of young children admitted during the last three years, the figures may be accepted as an indication of improvement in the condition of the poorer classes of the community. The total number of children at present under the board's control is 6985, of whom 3720 are provided for apart from their parents, and 3265 are with their own mothers—widows or deserted wives—who receive monetary allowances towards their support at rates determined by the board according to the merits of each case. Since the passing of the State Children Relief Act in 1881, 11,382 children have been placed out apart from their parents, and assistance has been rendered in the support of 8139 children with their own mothers under the Amendment Act of 1896.

The first principle of the boarding-out system is efficient oversight over the children after they have been boarded out to ensure that they are being kindly treated and are receiving proper lodging, food, clothing and education. Particular attention has been given during the year to this division of the board's work, and visits have been paid to the children at frequent and irregular intervals by both the official inspectors and the honorary lady visitors.

The collections from parents towards the support of their children during the year amounted to £1542 2s 1d. Calculated on the daily average number of children boarded out this represents a proportion of 14s 2d for each child. In the majority of cases the circumstances of the parents are of such a nature as to render contributions from them impossible; but there are a number who can contribute and who do not do so. Many of them, when they discover that their children are being comfortably housed, fed, clothed and educated by the Government, depart for one of the other States. Were the law strictly carried out in a few instances, and

especially if it were possible to inflict punishment upon the wrongdoers, there would be less temptation to parents to evade their responsibilities. The total expenditure for the year amounted to £86,261 19s. Of this sum, £33,403 7s 4d was for the maintenance, cost of clothing, medical fees, and proportion of travelling expenses for the children boarded out (i.e., those whose maintenance is a direct charge upon the State) apart from their parents. After deducting the amount (£1542 2s 1d) contributed by parents towards their support, the actual cost to the State of each child during the year was £14 12s 2d. In allowances to widows and deserted wives towards the support of their own children in their own homes the expenditure was £19,261 18s 4d. To this, however, must be added £148 17s 3d, value of clothing supplied, and £942 3s 1d, proportion of the cost of inspection, making a total of £20,352 18s 8d; the cost per head was £6 6s 9d.

Included among the inmates of the cottage homes are several children classified as of feeble mind. In the opinion of the visiting medical officer they are not imbecile, and, therefore, not eligible for transfer to the Hospital for the Insane at Newcastle, and their mental deficiency is such that they cannot be boarded out with private families, as the ordinary foster-parent, apart from her want of experience of their treatment, and ignorance of the special instruction they require, cannot reasonably be expected to devote to them that particular care and attention which are essential to their well-being. The cottage homes are the only institutions under the board's control to which they can be sent, and their presence in them is an error, as the homes were established for only the physically infirm. There are no facilities for properly training and educating the mentally afflicted, and no means of affording them. Their bodily comfort is all that can be provided for; development of their mental faculties is impossible under existing conditions. They certainly attend, with the other inmates of the homes, the school conducted by the teacher appointed by the Department of Public Instruction, but they make practically no progress, as they are of that class of children whose education is one of the difficulties of our system of public instruction—they cannot be taught in ordinary elementary schools by ordinary methods. A separate division is needed for them under the care of a teacher who, by experience and special training, is qualified to give, during their school life, that individual teaching by which alone it is possible to educate them and fit them to ultimately earn their own livelihood. In the absence of any such provision they will remain in the cottage homes until their age renders their removal to the asylums for the adult infirm and destitute imperative, and there they will have to be permanently kept at the cost of the State.

Dr. Mackellar in conclusion states that the "boarding-out system" having now survived the test of 23 years and become the national policy of dealing with the orphaned and destitute children of the State, testimony in its support in this report is no longer necessary. This State was one of the first to adopt the boarding-out system, and the wisdom of the step, from both a sentimental and an economical point of view, is evidenced by its almost universal adoption elsewhere.

Messrs. DENYER BROS., of 281 George-street, Sydney, notify the arrival of new samples of Surgical Weighing Scales, with nicked telescoping standard for recording height. Weighing capacity ranges from 1 ounce up to 20 stone, and the firm cordially invites inspection by the members of the profession.

PUBLIC HEALTH.

South Australia.

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH,
ADELAIDE.
(Abstract.)

From the annual report of Dr. T. Borthwick, Medical Officer of Health at Adelaide (South Australia) for the year ending September, 1902, we learn that the population was estimated by the Registrar-General to be 39,345 on January 1st, 1902, an increase of 152 for the 12 months.

BIRTHS AND DEATHS.—There were registered during the year 942 births and 967 deaths. The birth-rate and death-rate per 1000 amount to 23.94 and 24.57 respectively. The infantile mortality was 15.2 per 1000 births.

There has been a continued progressive decline of the birth-rate, and an increase of the total death-rate and of the infant mortality for this year over those of the two preceding years.

There have been no deaths this year from scarlet fever, erysipelas, or puerperal fever; and the deaths from the other diseases specified compare favourably with previous years, with the exception of measles, which caused 35 deaths. The deaths from diphtheria for the last four years show an almost progressive decline—8, 9, 6, and 4 respectively. Typhoid is responsible for 11 deaths, as compared with 10, 5, and 14 for the preceding three years. Phthisis shows a decline during the four years—69, 70, 67, and 64 respectively; but other forms of tubercular disease maintain their fatality, causing as many as 21 deaths this year. Diarrhoeal diseases caused an unusually large number of deaths in the March and June quarters, although not in excess for the whole year.

INFECTIOUS DISEASES.—*Typhoid*: 173 cases were reported, of which 124 were imported from outside districts. This leaves 49 cases, which apparently had their origin in the city. Four of these derived infection from pre-existing cases in the houses; one was contracted in a hospital. It was impossible to trace the origin of the remaining 44 cases. Eleven deaths were registered during the 12 months.

Diphtheria: 78 cases were reported, of which 40 were imported. This leaves 38 cases of apparently local origin to be accounted for. Four of these undoubtedly were infected from the original patient in the house, a second case having occurred in three houses while the first patient was ill or convalescing. One was contracted in a hospital. The remaining 38 cases were not traced to any special source, but the conditions of most of the houses affected were generally insanitary. Four deaths were registered during the 12 months.

Scarlet Fever: Only 11 cases were reported, and they occurred apparently independently of each other and of any common source. There were no deaths from this disease.

Measles: It is not compulsory to report this disease under the Health Act, so that the number of cases reported give no idea of the extent of the outbreak. It commenced in West and North Adelaide in August, having extended to these parts of the city from the western suburbs, and spread rapidly through the public schools, one after the other being attacked.

Pulmonary Tuberculosis: 122 cases were reported during the year, of which 43 were imported for hospital treatment. This leaves 79, and these were associated with no particular season of the year nor with any

special part of the city. A large number of the houses in which this disease occurred were insanitary; the conditions noted being want of ventilation and want of light in rooms, dampness of walls, and dirty walls and ceilings. 70 deaths occurred from this disease during the year. 102 houses were finally disinfected and cleansed during the year after this disease. The James Brown Trust is doing good work in this respect at Kalyra Home Sanatorium, but the accommodation is limited, and further provision is urgently required. It is gratifying to know that this State is the first in Australia to possess a private institution under direct medical supervision and control for consumptive patients of the better classes, and Dr. Gault is to be congratulated on the move which he has made in this direction.

GENERAL SANITATION.—Systematic inspection of a house to house character has been carried on for nearly two years, but only two-thirds of the city has been covered in that time. In addition to the systematic inspection, complaints have been attended to, and special duties, such as house disinfection, spitting on footpaths prevention, smoke observations, milk and food inspection, noxious trades supervision, etc., carried out, and these take up a great deal of time. It is absolutely imperative to make a fourth permanent inspector and to further increase the staff, if the sanitary condition of the city is to be satisfactorily maintained.

INSANITARY HOUSES.—During the year, 79 houses were condemned as unfit for human habitation, of which 33 were ordered to be taken down, while the remainder were placed in a satisfactory condition. Over 1000 notices were served to cleanse, ventilate, or repair other houses.

BACKYARDS.—A better state of things generally now exist than in 1900, but there is still room for improvement, and constant supervision is needed. Last year 127 notices were served to abate various nuisances in backyards.

REFUSE DISPOSAL.—The disposal of refuse removed from private premises continues to be by means of "tips" in various parts of the Park Lands. The picking of rags, etc., at the tips has been prohibited, and steps are taken to destroy all rats at the tips. But a destructor must be looked upon as an essential part of the sanitary equipment of a city.

SPITTING IN THE STREET.—The by-law prohibiting spitting on the footpath is now in force, and this practice has been to a considerable extent checked without resort to legal procedure.

New South Wales.

Bubonic Plague.—In view of the state of affairs at San Francisco with regard to bubonic plague, the Board of Health have decided to insist upon a rigid enforcement of the regulation laid down with reference to the admission of ships which have touched at plague ports. No matter what precautions have been taken to prevent rats getting aboard vessels, they will be of no avail if fodder or grain has been loaded. Vessels arriving from a plague port with fodder or grain aboard will have to discharge their cargo out in the stream, and will not be allowed to come alongside a wharf, jetty, or pier until they are thoroughly fumigated. Dr. Ashburton Thompson states that this regulation will be enforced in the case of all vessels arriving under the conditions mentioned from Bombay, Hongkong, or any other port which in the opinion of the board is infected with bubonic plague. He points out that, in view of the contemplated importation of fodder and foodstuffs from abroad, it is absolutely necessary in the interests of the health of the people of Sydney that the utmost

precaution should be taken to prevent the possibility of rats infected with bubonic plague being introduced in cargoes. Dr. W. G. Armstrong, of the Health Department of the Sydney City Council, states that the council is quite alive to the necessity for taking every precaution against the possibility of a fresh outbreak in Sydney. The sanitary inspectors were engaged making house-to-house visitations in what were regarded as "dangerous" parts of the city. The wharfs also would be inspected so far as practicable, and special attention would be paid to rat-infested houses and otherwise insanitary premises.

Sewerage Works at Hay.—The official starting of the Hay sewerage works took place on November 22nd. The Mayor stated that Hay was the first provincial town to adopt a complete system of underground sewerage, the total cost of which was estimated at £22,000. The sewage is to be treated by the septic tank and filter bed process.

Smallpox on a French Mail Steamer.—The French mail steamer "Ville de la Ciotat" left Marseilles for Australia, and on November 7th a lascar member of the crew was found to be suffering from smallpox. He was isolated and landed at Colombo on November 17th. The steamer sailed for Fremantle on November 18th. The passengers for Western Australia were landed in quarantine, and the steamer then left for Melbourne. On reaching there the Victorian passengers were also placed in quarantine. No vaccination was done until Melbourne was reached. It was reported from Melbourne that all the passengers and crew who left for Sydney appeared to be in good health. On the arrival of the steamer in Sydney on December 7th it was reported to the health officer that two of the crew had developed smallpox. The rash was first observed on the afternoon of the day the vessel left Melbourne. The ship and everyone on board went into quarantine. Those passengers and crew who were vaccinated between Melbourne and Sydney will, if the vaccination is successful, be released in 15 days' time. All those who were not vaccinated, or whose vaccination proves not to be successful, will have to remain in quarantine 21 days from December 7th. The vessel was fumigated speedily and handed back to the agents. No fresh cases have been reported at the Quarantine Station, and all is going on well.

New Zealand.

Smallpox.—Owing to the occurrence of smallpox on a steamer at Sydney, modified quarantine will be enforced against vessels from Australia.

Victoria.

Adulteration of Raspberry Cordials.—A report of great public importance dealing with the adulteration of popular beverages which have been considered to be wholesome, harmless and refreshing, was presented to the Board of Public Health, Melbourne, on November 26th, by Mr. Percy W. Wilkinson, Assistant Government Analyst. The board's inspectors, acting under the direction of the chairman, Dr. Gresswell, were authorised to purchase representative samples of raspberry cordials in Melbourne and the principal country cities and towns. The examination of the samples was directed principally to the detection of coal tar dyes and dyes other than the natural raspberry colouring, chemical preservatives, and artificial sweetening substances (saccharin, dulcin). The result of the examination is briefly summarised in the following table:—
Number of raspberry cordials examined, 44; artificially coloured, coal tar dyes 15, cochineal dye 23—total 38;

salicylic acid, 35; saccharin (coal tar sweetening), 14. To fully realise the extent of the adulteration of Victorian raspberry cordials, it is only necessary to glance at these results. An almost incredible feature is disclosed. Of the 44 samples analysed, one only was found unadulterated with coal tar dye, cochineal, salicylic acid or saccharin. This single unadulterated sample excelled all the others in colour, flavour and aroma. Eleven samples, labelled "Superior," "Finest," "Best," were grossly manipulated, being not only artificially coloured either with coal tar dye or cochineal, but showing also addition of both salicylic acid and saccharin.

Bubonic Plague.—At a meeting of the Board of Public Health on November 26th Dr. Gresswell announced that the recent recrudescence of bubonic plague at Townsville necessitated that steps should be taken to prevent the possibility of infection spreading to Victoria. A report was submitted showing the urgent need of more complete and careful supervision of the various city restaurants and the methods adopted of storing, handling, and preparing food for public consumption.

Queensland.

Bubonic Plague.—The last case in Brisbane occurred on August 5th, 1902. With the exception of this case there has been no case in Brisbane since July 4th, 1902. The last plague infected rat in Brisbane was discovered in August, 1902. Three cases were reported in Townsville on the 24th inst. Two of these proved fatal. A cleansing order under section 19 of the Health Act of 1900 is now being enforced at Townsville.

HOSPITAL INTELLIGENCE.

Prince Alfred Hospital.—At the last monthly meeting of the board of directors of the Prince Alfred Hospital a letter was received from the medical board recommending that, as far as possible, consumptive patients should not be treated in the general wards, and it was agreed that this course was desirable, and should be followed as far as space would permit. It was stated by the chairman that the plans for the new pavilions provided for separate wards which might be available for consumptive patients. It was agreed that a meeting of the conjoint board be held for the appointment of clinical assistants to the out-patients' departments and the resident medical officers in February next.

Balmain Hospital.—At the meeting of the committee of management of the Balmain Hospital, held on November 18th, a communication was received from the Hospital Saturday Fund of New South Wales, stating that at a meeting of delegates from the hospital board, the Balmain Benevolent Society, and the local friendly and trades societies collection committee, which was held under the auspices of the fund, it was resolved—"That it be referred to the Balmain Hospital Board, the Balmain Benevolent Society and the Balmain Friendly and Trades Societies Collection Committee to consider the advisability of establishing a local board of control to govern and regulate as far as possible all public appeals at Balmain for public charities." It was, after some discussion, decided not to entertain the proposal.

Molong Hospital, N.S.W.—A short time ago the medical officer, Dr. Reiaich, furnished a report on Molong Cottage Hospital, pointing out its insanitary condition and the urgent need of improvements. The

hospital appointed a sub-committee, which endorsed Dr. Reisch's report. Dr. Ross, who at that time was president of the hospital, wrote to the Premier demanding that a full investigation be made regarding the alleged insanitary condition of the building and the accuracy of Dr. Reisch's report. Dr. Millard, assistant medical officer for the Government, was sent up to investigate the matter, and the committee has just been placed in possession of his report, together with the report of Dr. Ashburton Thompson, Government Medical Officer. As regards the substance of Dr. Reisch's report, the chief medical officer of the Government supports it in every particular.

Yorkestown Hospital, S.A.—The new hospital was formally opened on October 31 by Mr. E. Stonhouse (chairman of the board of management.) The building is a fine substantial structure, 44 ft. by 24 ft. by 16 ft. high. There is a hall 9 ft. by 9 ft. by 13 ft., with two yards 21 ft. by 15 ft. by 13 ft. high. At the back of the hall is the nurses' room, with a window looking into each ward. A handsome porch adorns the front. A stone wall with an iron creasing separates the grounds from the roadway. Additions have been made to the old building. The total cost of all, with seven beds and bedding, is £558 6s 6d, of which £335 3s 3d has been subscribed.

Hobart Hospital—At the monthly meeting of the board of management of the Hobart General Hospital on November 14th the medical committee reported that for some time past they had had under consideration the matter of future appointments of resident medical officers at the hospital. The number of applications received latterly whenever a vacancy has occurred have become less each successive year, the reason being that suitable and recently qualified medical men do not care to apply for a position where they have to incur the expenses of furnishing, housekeeping, etc., for the comparatively short period these appointments are usually held. The committee recommended that the system in force in most of the leading hospitals be adopted, viz., to provide board and furnished quarters, etc., limiting the period of engagement to three years, terminable at two months' notice on either side. Salary for first year to be at the rate of £75 per annum; second year, £100; third year, £125. The report was adopted.

Hospital Accommodation in Wellington.—A proposal is afoot to build an infectious diseases hospital in Wellington (N.Z.). Two hundred and sixty cases of scarlet fever have occurred in Wellington since the beginning of April, and about 100 cases of diphtheria within the same period. At the meeting of the hospital trustees held on October 22nd it was decided to furnish a pathological room in the morgue building. The proposed site for the home for chronic invalids is on the south-eastern corner of the hospital grounds.

UNIVERSITY INTELLIGENCE.

University of Adelaide Pass Lists.—Degree of Master of Surgery: Henry Simpson Newland, M.B.B.S. Ordinary examination for the degrees of Bachelor of Medicine and Bachelor of Surgery (first class in order of merit; second and third class in alphabetical order):—First year: First Class, William Ray (recommended for the Elder prize); Second Class, Leonard James Pellew, Rex Garnet Plummer; Third Class, Sydney George Leyland Catchlove, Frank Gladstone Cowan, Ernest William Griffiths, Eric Henry

Lewis, Archie Fergusson Miller, Devon Parkhouse. Second year: First Class, none; Second Class, Robert Douglas Brummitt, Dean Dawson, William Morgan Hunn, John Victor McAree, Walter Henry Russell; Third Class, none. Third year: First Class, Eulalie Hardy Hanton Burnard and Constance May Cooper equal (recommended for the Davies Thomas scholarship); Second Class, Phoebe Chapple, B.Sc., Malcolm Leslie Scott; Third Class, Renfrey Gershom Burnard, Alfred Francis Stokes. Fourth year: First Class, Lionel Wykeham Hayward (recommended for the Davies Thomas scholarship), Edward Joseph Stuckey, B.Sc., Rupert Eric Magarey; Second Class, Melville Birks; Third Class, none. Fifth year: First Class, Helen Mary Mayo (recommended for the Everard scholarship), Francis Frederick Muecke; Second Class, Arthur Rose Clayton, Clement Victor Wells; Third Class, Rosamond Agnes Benham, Alexander Ruan Caw, Clive Newland.

University of Melbourne.—At a meeting of the University Council on December 8th the following students and graduates were admitted to the degrees under which their names appear below:—Bachelor of Medicine: Mary Baldwin, H. S. Bush, T. C. L. Camm, J. H. L. Cumpston, W. N. Davies, C. E. Dennis, S. W. Ferguson, H. T. Hamilton, R. Howden, E. V. R. Hucklell, J. P. Kelly, W. R. Kelly, R. M. Lane, M. C. Ludwill, C. Maxwell, M. K. Moss, O. H. Peters, H. Sutton, D. B. Walshe, A. A. Weir; in absentia, L. Morris. Bachelor of Surgery: C. E. Dennis, R. Howden, J. P. Kelly, W. K. Kelly, C. Maxwell, M. K. Moss, D. B. Walshe.

MILITARY INTELLIGENCE.

VICTORIAN MILITARY FORCES.

TRANSFER.

Captain Charles Louis Lempriere, M.B., from the reserve of officers, Militia Medical Staff, to be captain, Militia Medical Staff, to complete establishment, to date on and from 7th November, 1902.

RESIGNATION.

Captain William Christian Daish, M.D., Militia Medical Staff, of his commission dated 6th May, 1898.

MEDICAL NOTES.

Home for Trained Nurses, Sydney.—At the annual meeting in connection with the Home for Trained Nurses, Phillip-street, Sydney, held on December 2, the report stated that for the last four years the home had been absolutely self-supporting, and that the nurses were still constantly employed. According to the proposal made by Mrs. Gurney last year, the committee provided visiting nurses for paying patients under rules and regulations similar to those adopted so satisfactorily in England; but, so far, the idea had not commended itself to the Sydney public. The chairman (Sir Arthur Renwick) said that would be the last meeting of the home. It had been in the habit of sending out nurses to the poor, but it was now about to become a kind of proprietary nursing home. They would notice that the sum of £250 was to be divided among the nurses. With regard to the subscribers' fund, it had been unanimously agreed to transfer this, amounting to £1007 14s 2d, to the Women's Hospital in Surry Hills, in order that similar work might be carried on by its means.

The Care and Custody of Neglected Infants.—The Hon. Dr. Mackellar, the president of the State Children's Relief Board of New South Wales, has intro-

duced a bill into the Upper House to "make further and better provision for the protection, maintenance, and care of infants; to provide for the inspection, supervision, and control of places established or used for their reception and care, and to constitute children's courts."

Charitable Donations.—At the last meeting of the board of directors of the Sydney Hospital a communication was received from Mr. G. H. Martin, of Sydney, enclosing cheque for £500 from Messrs. Wilson & Cunningham, of Arbroath, Scotland, as a donation towards the funds of the institution.

Sydney Medical Mission.—At the second annual meeting of the Sydney Medical Mission, held on December 9th, Dr. J. Carlile Thomas (medical superintendent) in her report said during the year 2600 patients had been treated; 1943 visits were paid to the homes of 482 patients; the attendances of 2118 patients at the dispensary amounted to 10,735, and 21 operations had been performed. The report was adopted, as was also the treasurer's statement. During the meeting a number of subscriptions were handed in or promised, including £100 from Mrs. Hugh Dixon.

Faith Healers.—At an inquest held by Dr. R. H. Todd (Deputy City Coroner for Sydney) a fortnight ago, a man named Johnston, a plasterer by trade, was committed for trial for the manslaughter of his wife, by refusing to secure medical attendance for her. According to Johnston's statement he and his wife belonged to the "People of Zion," who do not believe in doctors but believe in prayer. The unfortunate woman was confined, and, according to the medical evidence of Dr. P. M. Wood, of Ashfield, and Dr. Jamieson, who made the post-mortem examination, she died from post-partum hæmorrhage and inversion of the uterus. The nurse in attendance did her best to persuade the deceased to have a doctor, but she absolutely refused to allow a doctor to see or touch her.

The Cure of Scarlet Fever.—At the recent Medical Congress held at Carlsbad, Dr. Paul Moser, of Vienna, announced that he had discovered a curative serum for scarlet fever. He obtains the serum by injecting horses with the products of streptococcal cultures, and has used it clinically in upwards of 80 cases with marked benefit. In some of the cases erythematous eruptions developed, but they were not of long duration, and no other ill effect followed the injections. The Austrian Minister of the Interior has given orders for the preparation of the serum in large quantities in order that it may be distributed to, and its value proved in, all the hospitals in Vienna.

Inoculation for the Plague: Some Deaths in the Punjab.—According to a cablegram in the *Sydney Morning Herald*, inoculation for the plague in the Punjab has been suspended. Bad serum has caused the deaths of 10 persons who had been inoculated. The contamination of the serum is attributed to the changes suggested by the Plague Commission in the method of preparation.

OPENING IN TASMANIA FOR A MEDICAL MAN.—The Municipal Council of Bothwell, Tasmania, has resolved to appoint a duly qualified medical practitioner (who must reside in Bothwell) to be health officer for the district, at a salary of £100 per annum. He will be at liberty to take private practice. Applications, giving full particulars, to be addressed to the Council Clerk, Town Hall, Bothwell, Tasmania, who will give any information which may be asked for.

A. C. HIRST, Council Clerk.

PERSONAL ITEMS.

Dr. John MacPherson has removed from 1 Hyde Park terrace, Liverpool-street, Sydney, and has commenced practice at Young (N.S.W.).

Dr. Symes has resigned the position of District Health Officer for Canterbury (N.Z.). Dr. Finch, who has been in Hawke's Bay for some time, has been appointed to succeed him.

Dr. J. A. Beattie, medical superintendent of the Liverpool Asylum and Government medical officer for the Liverpool district, left Sydney for India by the "Oceana," having been granted a few months leave of absence to recruit his health. A few of his friends gave him an enthusiastic send-off at Liverpool railway station.

Dr. Joseph Parker, late of Redfern, has removed to Bulladelah (N.S.W.).

Dr. Lyden, formerly of College-street, has resumed practice at Avoca-street, Randwick.

Dr. Hope, a prominent member of the Dubbo Gun Club, who is leaving the district, has been presented with a trophy by members of the club. He has held the position of salaried medical officer to the Dubbo Hospital from 1897 until the beginning of the year, and has been an officer of the local race, gun, and golf clubs.

A farewell banquet was tendered by the citizens to Dr. Heeley, Government medical officer and returning officer for Young, in the Town Hall on November 19th. He has been a resident of the town for the past 28 years, and is retiring from practice through failing health and advanced age. Mr. Tucker proposed the health of the guest, and presented him with a silver fruit stand and a pair of silver vases, and a silver cake stand for Mrs. Heeley. Dr. Heeley feelingly responded. The members of the Loyal Burrangong Lodge, I.O.O.F., Young, presented Dr. Heeley, medical officer of the Lodge for over 27 years, with an illuminated address.

Dr. R. J. Allan has resigned the appointment of honorary surgeon to the Balmain Hospital.

Dr. Goode has been appointed an honorary consulting medical officer to the Sydney Hospital.

Dr. Camac Wilkinson was elected alderman for Belmore Ward at the recent Sydney municipal elections.

Dr. F. G. Connor, of Lismore, who has now recovered from a recent severe illness, has disposed of his practice to Dr. Tilley, late of North Sydney. Dr. Connor, who for 12 years has been medical officer of the Oddfellows' Lodge, having resigned, Drs. Tilley and Parker have been appointed in his place. The Lodge have entertained Dr. Connor at a smoke concert.

Dr. E. J. Jenkins has returned from his trip to Europe and has resumed practice at Macquarie-street, Sydney.

Mr. Stuart MacBirn, M.B., the senior medical officer at Yarra Bend Lunatic Asylum, Victoria, has resigned his position in the Government service. Mr. MacBirn has not been in good health for some time, and it is for this reason that he asked to be relieved of his duties. He has been in the Public Service since 1897.

Dr. R. Hogg, of Invercargill, arrived from London by the R.M.S. "Orontes," via Melbourne.

Dr. Walter Maraden, of Bristol, England, has arrived in Dunedin (N.Z.), and is contemplating settling in practice in one of the Australian capitals.

Dr. E. J. O'Neill, who accompanied one of the New Zealand contingents to South Africa as surgeon, has arrived in London, and is studying at University College Hospital for a London qualification. Drs. Douglas Bett and H. Baillie are also there, with the same object in view.

Dr. Jas. H. Neil, of Dunedin, who has been acting as anaesthetist at the Central Throat Hospital, London, has returned to the colony by the s.s. "Tongariro," acting as surgeon in charge of the troops, with Dr. H. Gilman, of Wellington, as his assistant.

Dr. Rogers, of Wyndham (N.Z.), was, on his recent return from South Africa, presented with an illuminated address by the residents of Wyndham, as also was Dr. McARA, who has been in charge of Dr. Rogers' practice.

Dr. Colquhoun, of Dunedin (N.Z.), left by the "Warrimoo" on October 19th for a trip to England. Dr. Marshall Macdonald is his *locum tenens* during his absence.

Amongst the New Zealanders who have returned to Wellington (N.Z.) by the s.s. "Tongariro" is Dr. Hamilton A. H. Gilmer. He was educated at the Wanganui and Wellington Colleges, and proceeded to Edinburgh University, where he took the degree of M.D. last year. Dr. Gilmer proposes practising in Wellington.

Dr. W. A. Conlon, of Reefton (N.Z.), has been appointed medical superintendent of the Reefton Hospital, in place of Dr. Whitton, who has resigned, after filling the position for over 16 years.

Dr. Nigel Alan Allison Trenow, L.R.C.S. (Irel.), has resigned his position as medical officer at Croydon, Queensland.

MEDICAL APPOINTMENTS.

NEW SOUTH WALES.

Campbell, Alfred, M.R.C.S., Eng., to be Visiting Surgeon to the Gaol at Young, *vice* Dr. Heeley, relieved.

QUEENSLAND.

Malaher, Arthur Ernest, L.S.A. Lond., to be Medical Officer at Beenleigh, *vice* Harold John Hutchens, M.R.C.S., Eng.
Price, Thomas Arthur, M.B., Ch.B. Edin., to be Assistant Medical Superintendent at the Hospital for Insane, Toowoomba, in the room of John Barr McLean, M.B., B.S., Univ., Melb., resigned.

White, George Vincent, M.B., B.S., Melb., to be Health Officer for the Port of Thursday Island, Medical Officer at Thursday Island, Medical Officer for the care, inspection and supervision of lepers detained in the Lazaret at Friday Island, and Visiting Surgeon to the Prison at Thursday Island, during the absence on leave of Joseph Leatham Wassell, M.B., M.Ch., Syd.

NEW ZEALAND.

Redman, William Edward, L.S.A., Lond., 1896, etc., to be a Port Health Officer for the Port of Picton, *vice* Dr. Claridge, resigned.

The following to be Public Vaccinators for the districts set opposite their names:—

Barcroft, Alfred Ernest Jaffray, L.R.C.S.I., etc., 1885 (*vice* Dr. Linney, resigned), Hastings.
Redman, William Edward, L.S.A., Lond., 1896 (*vice* Dr. Claridge, resigned), Picton.

WESTERN AUSTRALIA.

Browne, Dodwell, to be Acting District Medical Officer at Roebourne and Acting Quarantine Officer for the Port of Cockburn, during the absence on leave of Dr. Maunsell.
Corlis, Dr. J., to be Officer of Health for Menzies.
Makin, L. J., to be District Medical Officer at Koolbynie, *vice* James Thompson, transferred to Kalgoorlie.

PROCEEDINGS OF AUSTRALASIAN MEDICAL BOARDS.

NEW SOUTH WALES.

Brandon, Arthur John Spiller, M.B., B.S. Univ. Durham 1901, L.R.C.P. Lond. 1901, M.R.C.S. Eng. 1901.
O'Connor, William Lawrence, M.B., Ch.B., Univ. Melb. 1902.

For Additional Registration.

Cameron, Daniel Allan, M.Ch. Univ. Syd. 1901.
Graham, Mabel Jessie, M.Ch. Univ. Syd. 1902.

WESTERN AUSTRALIA.

Eason, William Robert, L.F.P.S. Glas. 1890, L.S.A. Lond. 1890.
Martin, Alfred Eugene, M.R.C.S. Eng., L.R.C.S. Lond. 1899, M.B., B.S. Camb. 1900.
Willis, Charles Savill, M.B., M.Ch. Syd. 1899.

TASMANIA.

Jackson, John William, M.B. Syd. 1895, Ch.M. Syd. 1895.
Owen, Arthur Geoffrey, M.B. Melb. 1899.
Whishaw, Reginald Robert, M.R.C.S. Eng., L.B.C.P. Lond. 1895, M.B. Camb. 1896, B.S. Camb. 1898, F.R.C.S. Eng. 1898.

QUEENSLAND.

Beet, William Sohley, Brisbane, M.R.C.S. Eng. 1901, L.B.C.P. Lond. 1901.
Burdakin, Tom, c/o Dr. Lane, Frescati, Ann-street, Brisbane, L.S.A. Lond. 1901.
Calhoun, James, M.B. 1901, B.S. 1902 Univ. Melb.
Dight, Wilfrid Billingsley, Warwick Hospital, M.B., M.Ch. Univ. Syd. 1902.
Ure, Edith, M.Ch. 1902 Univ. Syd.

SOUTH AUSTRALIA.

Loria, August, M.D. Cracow (Austria) 1896.

BIRTHS, MARRIAGES AND DEATHS.

BIRTHS.

ANDERSON.—On November 15th, at 40 Grosvenor-street, Moonee Ponds, the wife of John Anderson, M.A., M.D., late of Cobden—a son.
BEGG.—On November 12th, at Dudley (N.S.W.), the wife of William Begg, M.D., C.M.—a son.
HEALY.—On October 29th, at Ellerslie (private hospital), Kerang, the wife of J. J. S. Healy, L.R.C.P. and S.E., etc.—a son.
HODGE.—On November 11th, at Claremont (W.A.), the wife of V. Theodore Hodge, M.R.C.S.—a son.
MERRILLEES.—On November 20th, at Queenscliff, the wife of James F. Merrillees, M.B., B.A., Ararat—a son.
TROUP.—On November 13th, at 170 Victoria-street, North Melbourne, the wife of Dr. J. K. Troup—a son (stillborn).

MARRIAGES.

GROVES-CLARK.—On November 25th, at St. James', Turramurra (N.S.W.), by the Rev. R. Raymond King, M.A., W. R. Groves, M.B., Ch.B., Kyneton (Victoria), only son of J. W. Groves, Brighton (Victoria), to Edie Hawthorne, younger daughter of T. J. A. Clark, The Gunyah, Turramurra (New South Wales).

NEWCOMBE-FORRESTER.—On November 12th, at Christ Church, Warrnambool, by the Rev. Canon McGeorge, Frederick William Newcombe, L.R.C.P., L.R.C.S., Edin., only son of the late E. P. Newcombe, to Ethel Lucy, only child of Mrs. J. W. Forrester, Warrnambool. No cards.

DEATHS.

HENRY.—On November 22nd, at Benalla, Emily Frances (Paddie), third beloved daughter of Joseph, A.B. M.B., Trin. Coll., Dublin, L.R.C.S.I., and the late Edith Octavia Henry.

MEGGINSON.—November 16th, Archibald Megginson, M.B., F.R.C.S., Edin., eldest son of Dr. Megginson, of Scarborough England, aged 47 years.

QUINNELL.—On December 3rd, at South Yarra, Richard James Quinnell, M.D., late Surgeon-Colonel Indian Army Medical Service, in his 69th year.

RAY.—On November 21st, at St. Kilda, Victoria, Lena, wife of W. R. Ray, M.D., of Collins-street, Melbourne, and daughter of late Van Ransselaar Barker, of Brooklyn, Mass. (U.S.A.).

SMITH.—On November 16th, 1902, at 8 Perth-street, Frahran, John Smith, M.D., late of H.M. Customs.

BOOKS RECEIVED.

Catechism Series—Bacteriology and Parasites. Edinburgh: E. and S. Livingstone. Price 1s., illustrated.

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of Anatomy and Physiology, University of
Otago, N.Z.

Vice-Presidents: SYDNEY JAMIESON, B.A.
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W. W. GIBLIN, M.R.C.S. Eng.; E. W. J.
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MACGOWAN, M.B.; R. G. SCOTT, M.B.; C. C.
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MONS, M.D., Launceston; G. H. HOGG, M.D.,
Launceston; C. JOYCE, M.B., Beaconsfield;
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J. MCCALL, M.B., Ulverston; W. H. MACFAR-
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ston; J. RAMSAY, M.B., Hospital, Launceston.

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JOHN H. SCOTT, M.D. Edin., The University of
Otago, Dunedin. West Australia: ATHELSTAN
J. H. SAW, M.D. Camb., St. George's Terrace,
Perth. Queensland: WILTON LOVE, M.B.
Edin., Wickham Terrace, Brisbane.

Proceedings of Congress.

ON Monday, February 17th, the Congress will
meet at the Town Hall, Hobart, at 11 a.m., to
transact business, and at 8.30 p.m. His
Excellency the Governor will open Congress.
The President, Hon. G. H. Butler, will also
welcome members, but owing to the death of
the late President, already alluded to, and the
limited time at his disposal before meeting of
Congress, the customary Presidential Inaugural
Address will not be delivered.

Besides the ordinary work of the Sections,
two evenings will be devoted to the general
discussion on Cancer. The discussion, which
will be opened by Professor H. B. Allen,
Melbourne University, promises to be one of
the most important and interesting features
of the Congress.

It is expected that, if time permits on the
second evening, a motion will be moved, that
the time is opportune to form an Australasian
Medical Association with a permanent Council,
in lieu of the present Intercolonial Medical
Congress of Australasia.

After obtaining the opinions of the various
medical societies, the committee decided it
would be extremely difficult to frame a con-
stitution for such an association that would
meet with the approval of even a majority of
them. Probably after the subject has been
ventilated, Congress may take further steps if
thought desirable.

As important discussions are to take place in
the Public Health Section on Quarantine,
Plague, etc., the Mayors of the capital cities of
the Australian States have been asked to send
their medical officers of health, and it is antici-
pated that a large number of public health
experts will be present.

At the request of the committee, the Premier
of Tasmania has invited the other State
Governments to send representatives, and
already some of the States have appointed
their delegates.

The work of the Sectional Secretaries will be
materially assisted if members will forward
short abstracts of their papers before the last
week in January, and also provide the sec-
retaries with a type-written copy of their
papers, when Congress meets, for purposes of
publication. Members intending to be present
at the Congress are requested to inform the
General Secretary to that effect at their earliest
convenience, and should apply at once to the
local secretary for their membership tickets.

Members on arrival in Hobart are requested
to sign the roll at the Town Hall, and to state
whether they are accompanied by a lady.



HOBART—From the Bay.

The Railway Authorities of Victoria, New South Wales, South Australia, West Australia, and Queensland have agreed to allow single fares for the double journey to members (and one lady) attending Congress, conditionally that at least six persons avail themselves of the concession; New Zealand promises Excursion fares. To obtain the above concession it will be necessary for members to communicate with the Local Secretary of their State or Colony, who will issue certificates.

The Tasmanian Government has promised half-fares over all Government Railways to members and their wives. The production of Membership Ticket will be necessary to obtain the concession on Tasmanian Railways.

Steamship Reductions.—A. U.S.N. Co. grants 20 per cent. reduction on return fares for members and their wives. The Union S.S. Co. and Huddart Parker Co. will allow 10 per cent. reduction on return tickets. In order to secure these reductions it will be necessary for members to present their Congress tickets, countersigned by the Local Secretary of their State.

A glance at the programme of entertainments shows the desire of the committee, namely, that the social functions should not overshadow the scientific work of Congress.

It has been suggested that after the Congress is over a special trip round the north and north-west coast of Tasmania might meet with favour.

Provided a sufficient number intimate their intention of taking the trip, a special train will leave Hobart on Monday, 24th February, allowing visitors time to see Launceston and suburbs. Stoppages will also be made at Longford, Deloraine, Devonport, Ulverstone, and Emu Bay, and every opportunity given to visitors to see the country.

Some members of the executive committee will accompany the party. The return fare will be about £1 10s. per head, and it is expected Hobart will be reached on Wednesday night or Thursday morning.

Those wishing to take this trip should notify the general secretary as soon as possible, so that suitable arrangements may be made for the reception of visitors at the various places of call.

DAILY PROGRAMME.

SUNDAY, FEBRUARY 16TH.

- 11 a.m.—A Congress Sermon will be preached before members at St. David's Cathedral. Preacher: Rev. Reginald Stephen, M.A., Sub-Warden, Trinity College, Melbourne.
7 p.m.—Special Service will be held in St. Andrew's Presbyterian Church, Bathurst Street. Preacher: Rev. James Scott, D.D.

MONDAY, 17TH.

- 10 a.m. to 5 p.m.—Enrolment of Members and Issue of Tickets, etc., in the Town Hall.
11 a.m.—General Meeting of Congress at the Town Hall for the purpose of receiving the Report of the Executive Committee, and for the despatch of such business as may be brought forward.
3.30 p.m.—Afternoon Tea at Elwick or Botanical Gardens.
8.30 p.m.—Opening of Congress by His Excellency the Governor, and President's Welcome to Members.
9.30 p.m.—Reception by President and Mrs. G. H. Butler at the Royal Society's Rooms.

TUESDAY, 18TH.

- 10 a.m.—Presidential Address in Medicine.
10.45 a.m.—Meeting of Sections.
2 p.m.—Marine Excursion given by the Union Steamship Company.
8.30 p.m.—Discussion on Cancer to be opened by Prof. H. B. Allen, Melbourne.

WEDNESDAY, 19TH.

- 10 a.m.—Presidential Address in Surgery.
10.45 a.m.—Meeting of Sections.
12.30 p.m.—Drive to High Peak and Luncheon given by the President and Tasmanian Members of Congress.

THURSDAY, 20TH.

- 10 a.m.—Presidential Address in Public Health.
10.45 a.m.—Meeting of Sections.
3.30 p.m.—Garden Party at Government House.
9 p.m.—Reception at Town Hall by the Hon. the Premier and Mrs. N. E. Lewis.

FRIDAY, 21ST.

- 10 a.m.—Presidential Address in Midwifery and Gynaecology.
10.45 a.m.—Meeting of Sections.
2 p.m.—Special Trip to Salmon Ponds, with a Reception by His Worship the Mayor and Mrs. Geo. Kerr.
8.30 p.m.—Discussion on Cancer continued. Resolution re formation of an Australian Medical Association.

SATURDAY, 22ND.

- 10 a.m.—Final Meeting of Sections.
11 a.m.—Closing of Congress. Election of next President. Time and place of next Congress to be settled.
3 p.m.—Fishing Excursion. Bowling Match, Hobart Bowling Green. Golf Matches at the Newlands and Sandy Bay Links.

The Committees of the Tasmanian, Hobart and Athenaeum Clubs invite members of Congress to be honorary members during their stay in Hobart.

Historical Sketch of Tasmania.

In 1642 Anthony Van Diemen, the Governor of Batavia, commissioned Abel Jans Tasman to undertake a voyage of exploration, with a view to making discoveries in the South Pacific. Commencing his voyage from Batavia, he eventually sighted the West Coast of Tasmania. Proceeding south, he again came in view of land, but the ships were driven out to sea by a gale. When the gale moderated they returned to a bay, which they named Storm Bay, and eventually came to an anchor in a small bay to the north of Storm Bay, which they named Frederick Hendrick. They then set sail again, afterwards reaching New Zealand, and apparently taking no further trouble about a discovery which more than anything else in the life of Tasman, has immortalised his memory.

The island was known as "Van Diemen's Land" for



TOWN HALL, HOBART—Place of Meeting of the Congress.

more than two centuries after Tasman's discovery of it, when the name Tasmania was substituted.

In 1772, Captain Marion, who arrived from Mauritius in search of the southern continent, sailed into Storm Bay, but neither he, nor several other navigators who, during the following twenty years visited the island, discovered the Derwent.

Bass and Flinders, in 1798, were the first to sail through the Straits which separate the island from Australia, and which Flinders named after his companion. They also named the two mountain peaks that Tasman first sighted by the names of the two vessels in which his memorable voyage was taken, "Heemskirk" and "Zeehan."

The first settlement in Van Diemen's Land was made in 1803, when a party of convicts and military men, under Lieutenant Bowen, came from New South Wales and made an encampment at Risdon, on the eastern bank of the Derwent, and about four miles higher up the river than the present City of Hobart.

In 1804, the party under Lieutenant-Colonel Collins, who had made an unsuccessful attempt to colonize Port Phillip, started for the Derwent, and reached the settlement at Risdon, to find that it had been deserted by Bowen, and that the settlers who had remained there were almost in a state of starvation.

Lieutenant-Colonel Collins decided against Risdon as a permanent settlement, and laid out a site at the head of Sullivan Cove, naming it after Lord Hobart, then Secretary of State for the Colonies.

In 1810, when the population reached the total of 1310 persons, the *Derwent Star* was launched as a newspaper venture, but was discontinued after a few months. Four years after, the *Van Diemen's Land Gazette* was published, but only for four and a half months. The *Hobart Town Gazette*, a few years later, lived for nine years. At the present time fifteen newspapers—daily, weekly, and monthly—minister to the social, moral, and religious needs of Tasmania.

In 1804, the first settlement was made in the north of the island, at the west arm of the Tamar, which is now known as York Town. After a short stay, the opposite side of the river was selected in preference, and an encampment made at George Town, near Tamar Heads, but this was soon broken up, and the site of the present City of Launceston, at the junction of the rivers North and South Esk, was permanently fixed upon. In 1812 the two military settlements of the Derwent and Tamar were united under one administration, and Colonel Davey was appointed Lieutenant Governor of the whole island.

The celebrated naturalist, Charles Darwin, visited the colony in the *Beagle* on his voyage round the world. At the time of his visit, in 1836, the entire native population, then reduced to 210, had been removed to Flinders Island, "so that," he says, "Van Diemen's Land enjoys the great advantage of being free from a native population."

Wool was first exported in 1819, but it was then of little value.

In 1823, the Van Diemen's Land Bank was established; and about the same time the educational wants of the young in the colony were taken seriously in hand by the Government. A superintendent of schools appointed, and the way for a better and more perfect educational system made plain. During the years of Governor Arthur's administration, from 1824 to 1836, a large number of public and private schools were founded. In 1847, however, the Hutchins School, named after Archdeacon Hutchins, was built, a year before that Christ's College was opened near Longford, and the Launceston Church Grammar School was started in the northern city. Christ's College, after

some vicissitudes, was removed to Hobart, and conducted for some years as a scholastic institution with varying success, but is now closed. The High School was opened in 1850, on a beautiful site at the entrance to the Queen's Domain, and for many years supplied the educational wants of those who desired unsectarian instruction. On the retirement, a few years ago, of the Rev. R. D. Poulett-Harris, who had carried on the school since 1857, the committee of the High School made an arrangement with the council of Christ's College, by which the building was taken over for a boys' school in connection with the college. The experiment was not successful pecuniarily, and the fine building is now utilised for the Tasmanian University.

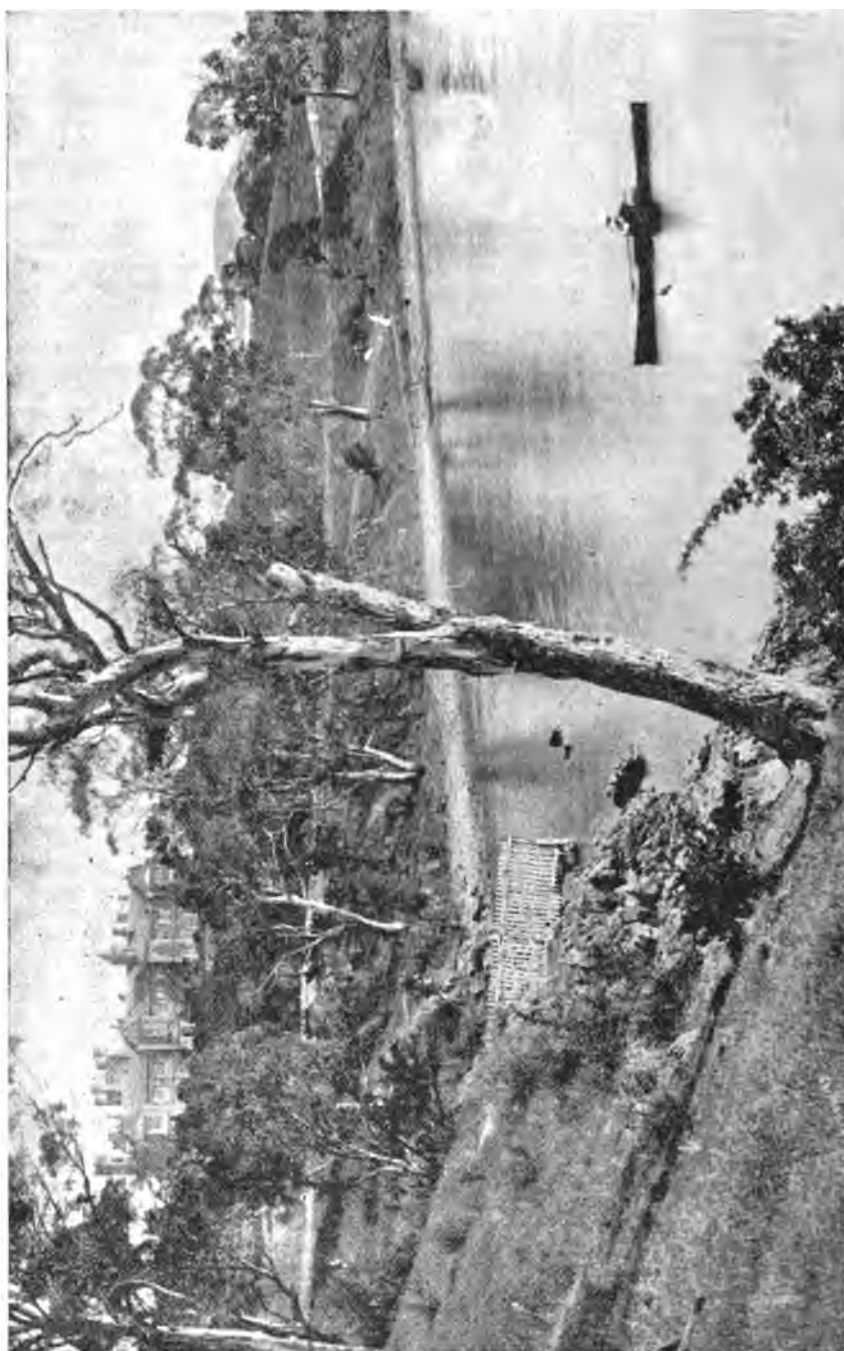
In 1858, a Council of Education was formed, which had at its disposal several exhibitions, as well as two Tasmanian scholarships, the holders of which received £200 a year for four years while pursuing their studies at an English University. The question of founding a Tasmanian University was discussed in Parliament, but it was not considered the right time for so extensive an undertaking. An annual examination was instituted in 1860 by the Council of Education for the degree of Associate of Arts.

Tasmania has now a University with three qualified professors, a Council, and a Senate.

Scientifically, Tasmania has progressed in an encouraging manner. Sir John Franklin, who became Governor in 1837, exhibited an amount of enthusiasm in scientific and educational pursuits which stimulated very considerably the intellectual life of the settlers. It was during his tenure of office that the French warships, "Zélé" and "Astrolabe," called at Hobart with news of their discoveries in the Antarctic regions, and an English expedition to the same regions, under Captains Ross and Crozier, started from and returned to the Derwent in the ships "Erebus" and "Terror." Dr. Joseph Hooker, who accompanied the expedition as botanist, used the opportunity to collect specimens of Tasmanian flora, and a large part of his descriptive account of the botany of the expedition is devoted to the flora of Tasmania. Mr. John Gould, collecting materials for his work *Birds of Australia*, also visited Tasmania, and included descriptions of Tasmanian species in his valuable works. Before the "Erebus" and "Terror" left Hobart, the commander, Sir James Ross, fitted up an observatory with the latest and most valuable instruments for meteorological and other observations, which materially assisted the scientific work of the colony.

A scientific society, called at first the Philosophical, afterwards the Tasmanian Society, owed its birth to Sir John Franklin and a few scientific and literary members of the community. The meetings of the Tasmanian Society were held at Government House once a fortnight, under the presidency of Sir John Franklin, and papers on geology, natural history, meteorology, ethnology, and botany, contributed by various members, were published in a volume called the *Tasmanian Journal*. Lady Franklin, who took a keen interest in natural history, built a museum on the Ancanthe Estate, about five miles from Hobart, where it may still be seen, though its exterior is rather obscured by the cowsheds that reposefully lean against its walls.

During the governorship of Sir Eardley Wilmot, the Royal Society grew out of the "Tasmanian," and continued to do the same useful work during the time of Sir W. T. Denison, who, in 1847, succeeded Sir Eardley Wilmot as Governor of Tasmania. As the Royal Society included horticulture in its objects, the Government made it a grant of the Botanical Gardens, which remained its property until 1885. The Society also started a museum and library.



GOVERNMENT HOUSE AND GROUNDS, HOBART.—From the Domain.

The Museum and Botanical Gardens were carried on by the Royal Society, aided by a Government grant, until 1885, when they were handed over to the State and placed under Trustees, leaving the Royal Society free to devote its attention to strictly scientific pursuits.

Not the least useful work undertaken during the last few years has been the introduction of salmonids. By whatever name the species may be called, certain it is that a delicious edible fish has been added to the number of Tasmanian fish already in our waters.

It is worthy of remark that one of the oldest members of the Royal Society, the late Sir James Agnew, M.D., bore the entire cost of the last shipment of salmon ova, amounting to about £800.

In 1855, Tasmania was granted a new Constitution, with the power to elect two Houses of Parliament. Sir Henry Fox Young was at this time Governor, and he and Lady Young, in 1858, took up their residence in the new Government House which had just been erected.

In 1857, the City of Hobart was first lighted with gas.

The first railway in Tasmania was opened in the North in 1871, but it was not until five years later that the Main Line, from Hobart to Launceston was built by an English company, and opened for traffic. The Government purchased the Main Line in 1890. With the exception of the V.D.L. Railway from Waratah to Emu Bay on the North-West Coast, and Mt. Lyell Company's line on the West Coast, all lines now completed are Government property, and the colony possesses about 470 miles of metal roads, of which only about 50 are yet to be opened for traffic, the remainder being in full working order.

The population of Tasmania is 172,480. The climate is mild and exceptionally healthy, and the scenery richly varied, grand, and beautiful. The country, notwithstanding some vicissitudes, is, in the main, prosperous, and suffers less from the "unemployed" difficulty than its larger neighbours.

Intellectually, Tasmania has no reason to feel ashamed of her record. Of painters, she boasts of a name honoured throughout Australasia, and rapidly coming to the front in England—Mr. W. C. Piguenit. Of poets, Caroline Leakey found a warm place in the affections of her fellow colonists in the fifties, and later, Rowland Davies made one of a quartette of Australian song writers. In singers, Miss Amy Sherwin takes a front rank. Among writers, Mrs. Humphry Ward is known throughout the English speaking world.

One might specially mention Mrs. Charles Meredith, whose first Tasmanian book was published in 1852, and who, at intervals during a long and useful career, sent forth her charming descriptions of life in Tasmania, with accounts of the animals, birds, and flowers which abound in the island.

To the Rev. John West, Tasmania is indebted for a valuable work entitled, "The History of Tasmania," published in the year 1852.

Mr. John Gould lived in Tasmania for some time, collecting material for his books on Australian and Tasmanian birds. Mr. R. M. Johnston, F.L.S., is the author of several important books relating to Tasmania, chief among them being his "Systematic Geology of Tasmania." Mr. James Bonwick has written voluminously on different phases of Tasmanian life and customs; and Mr. James Fenton, aided materially by Mr. J. E. Walker, F.R.G.S., has given to the world a fair and concise "History of Tasmania."

The number of scientific and other papers contributed to the Tasmanian and Royal Societies since 1842 is sufficient confirmation of the mental activity and love of individual research to be found among the inhabitants of Tasmania.

Short Guide to Hobart.

HOBART is situated on the River Derwent, about twelve miles above its junction with the sea. The Town Hall, the place of meeting of the Congress, is in Elizabeth-street. The Theatre Royal is in Campbell Street. There are salt and fresh water baths in the Domain, and at Sandy Bay. Turkish baths in Harrington-street. There are several lawn tennis clubs; a golf club at Newlands; and polo and racing clubs at Elwick and Risdon.

Cab Fares by distance. Any distance under one mile, 1s.; for each successive half-mile 6d. up to five miles. By time, 2s. for any time under half-an-hour; 3s. 6d. up to one hour, and so on. The cars on the three lines of the Electric Tramways commence running at 7 a.m., and between 8 a.m. and 11 p.m., the running is every fifteen minutes upon the New Town line, and every twenty minutes upon the Cascades and Sandy Bay lines. The fares are—2d. to the city boundary and 3d. beyond.

The Botanical Gardens are situated in the Queen's Domain, reached by following the Domain-road past Government House.

The Tasmanian Museum and Art Gallery, in which is a large room set apart for the display of Tasmanian specimens of natural history and minerals.

The Public Library is in the same building as the Town Hall, with an entrance in Elizabeth-street.

Sandy Bay is reached by tram; three miles from city. Tram, 6d.

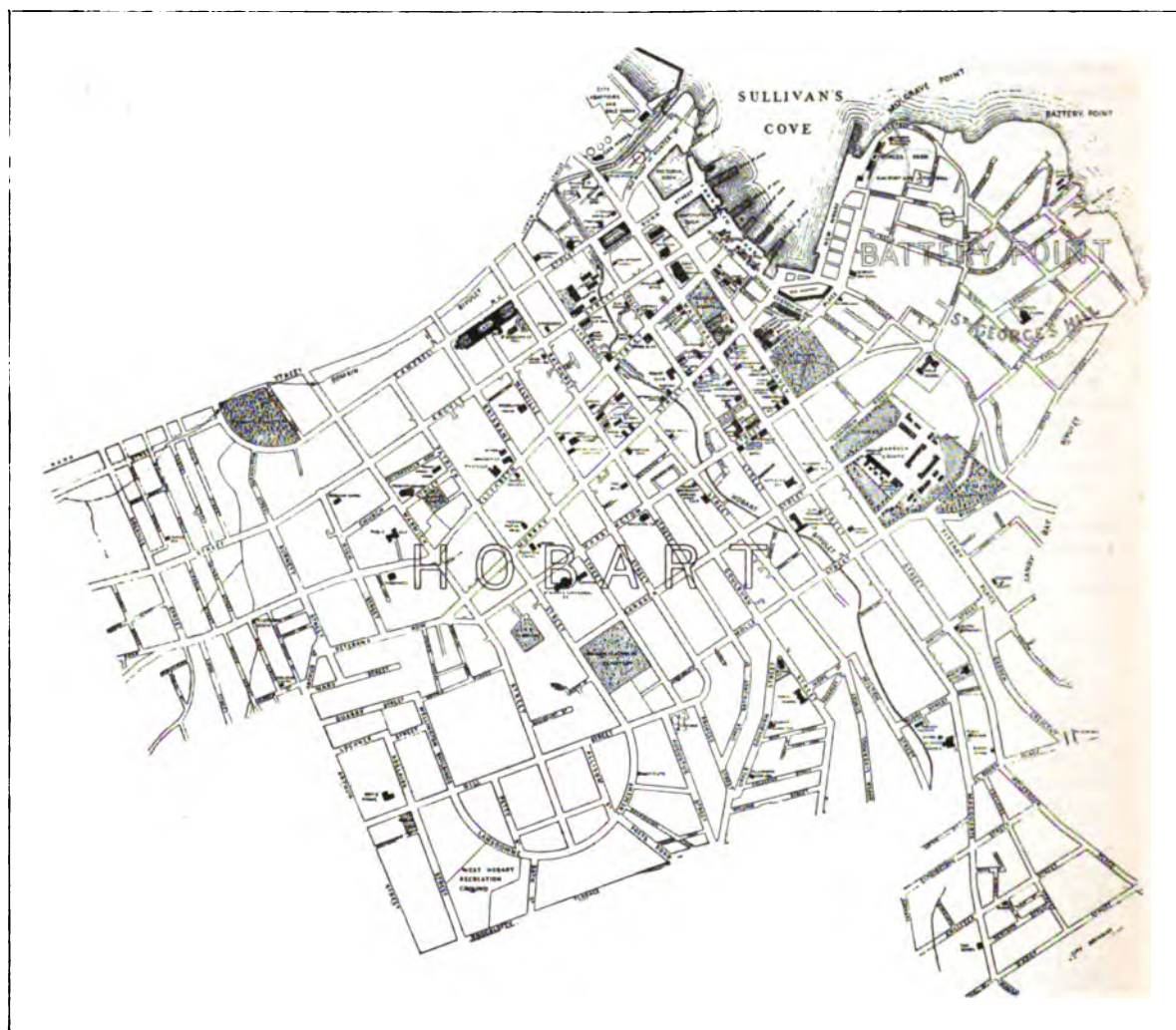
Derwent Park is reached by driving through the lower Domain Road, to Risdon Ferry, and continuing along the new road round the Prince of Wales Bay.

The Queen's Domain stretches from the railway station to Cornelian Bay, and has several roads, from the highest of which a lovely view is obtained of the mountain, the city, and suburbs towards Glenorchy, and the Derwent.

Coaches (fare 3s.) leave at 9 a.m. and 2 p.m. daily for the Fern Tree, a point on the Huon Road, on the slope of Mount Wellington, five and a quarter miles from Hobart. The Fern Tree Bower is a favourite picnic resort, and fireplaces and shelter pavilion are provided for visitors, free of charge. Two mountain streams, part of the Hobart water supply, unite here, and pass through screens into a stone aqueduct leading to the city reservoirs. The Silver Falls are some two hundred yards above the Bower.

The Springs are on the eastern side of Mount Wellington, 2,872 feet above sea level. There is a shelter pavilion for the free use of visitors; hot water is supplied gratuitously, and refreshments are also obtainable. A track runs from the Huon Road, between the entrance to the Bower and the church, to the Springs, the distance being one and a quarter miles. From the Huon Road, about five miles from Hobart, there is a well graded carriage drive (the Pillenger Drive) to the Springs, the distance by this route being two miles fifty-seven chains. The ascent of Mount Wellington from the Springs must be made on foot, but there is a well-defined track to the Saddle at the crest of the mountain and from the Saddle along the flat top of the mountain to the Pinnacle the track is marked out by guide posts. From the Springs to the Pinnacle is four-and-a-half miles.

(We are indebted to the proprietors of the *Tasmanian Mercury* for the views of Hobart, and to the "Tourist's Guide" and "Cook's Handbook," for the information given in this supplement).



PLAN OF HOBART.

ACCOMMODATION GUIDE.

The following is a list of Hotels and Boarding Houses:—

HOTELS.

Locality.	Description.	Accommodati'n	Terms.
HOBART—CITY			
Murray-street	Orient Hotel, H. H. Hadley, H. and C. baths, billiards, electric light	100	11/6 per day
do.	Metropolitan Hotel, R. Hart, H. and C. baths, billiards, leading commercial hotel	80	6/- to 10/- per day
do.	Derwent Hotel, T. Wilson, H. and C. baths, billiards, good stabling	40	4/6 per day, 25/- per week
Collins-street.	The Imperial, North Bess, manager, H. and C. baths...	150	6/- per day upwards
Liverpool-street	Heaththorn's Hotel, T. Heaththorn, H. and C. baths billiards... ..	100	10/6 to 12/- per day
do.	Carlton Club Hotel, A. H. Skogland, H. and C. baths	40	8/- per day, 42/- per week
do.	Criterion Hotel, H. Reid, H. and C. baths, etc. ...	25	6/6 per day, 30/- per week
Elizabeth-street	Empire Hotel, M. Parer, H. and C. baths, etc. ...	20	6/6 per day, 42/- per week
Campbell-street	Royal Exchange Hotel, Mrs. Harvey, H. and C. baths, etc.	10	5/- per day, 30/- per week
SUBURBAN.			
Fern Tree ..	Fern Tree Hotel, G. Bellmaine, H. and C. baths, billiards, orchard, etc.	50	10/- per day, 60/- per week

PRIVATE ACCOMMODATION.

HOBART—CITY.			
Davey-street ..	"Toogooloowa" (Holebrook Place), Mrs. M. Ward, H. and C. baths, garden	15	42/- to 63/- per week
16 Davey-street ..	"Aberfeldie," Mrs. Todd, H. and C. baths. (select accommodation)	20	By arrangement
33 do. do. ...	"Woodbourne," superior accommodation, home comforts, H. & C. baths, fernery, one minute from tram	30	By arrangement
25 do. do. ..	Miss A. Nichollas, five minutes from P.O. and wharf, on tram line	12	25/- per week
Murray-street ...	"Highfield Hall," Mrs. Eady, H. and C. baths, estab. 1880	30	By arrangement
Byron-street ...	"Bertrams," Mrs. Coverdale, garden, H. and C. baths	20	25/- and 30/- per week
Bathurst-street ...	"Eltham," Mrs. O. H. White, H. and C. baths, dark room for photographers (central)	30	25/- to 35/- per week
16 St. George's Hill	"Edgehill," Mrs. Plunkett, H. and C. baths, splendid view of river	10	30/- to 42/- per week
St. George's Hill (Crellin-street) ...	"Talune," Mrs. McArthur, H. and C. baths, close to tram and beach	15	21/- to 30/- per week
155 Macquarie-street	"Lalla Rookh," Mrs. Wells, H. and C. baths	25	5/- per day, 25/- to 30/- per week
Macquarie-street ...	"Macquarie House," Miss Gaell, H. and C. baths, etc.	20	5/- per day, 30/- per week
128 Macquarie-street	"Marieville," Mrs. Farrar, H. and C. baths	14	By arrangement
48 Macquarie-street	Mrs. Clements (late of Pressland House), H. and C. baths	12	10/- per day, 63/- per week
Murray-street ...	"Waterloo House, Misses Boyes, H. and C. baths ...	30	5/- per day, 30/- per week
7 Davey-street ...	Mrs. Morrisby's	—	42/- per week
Elizabeth-street ...	"Westella," Mrs. Butler, H. and C. baths, etc. ...	70	10/- per day, 63/- per week
SUBURBAN			
Moonah	"Claremont," Miss Clark, H. and C. baths, orchard; near tram terminus and railway station	12	30/- to 42/- per week
Fern Tree	"Lapoina," Miss Hall, baths, garden, fruit	10	30/- to 35/- per week
do. do.	"Fern Tree Villa," Mrs. Smith, H. and C. baths, and shower, garden, tennis court, telephone bureau ...	30	25/- to 30/- per week
do. do.	"Leslie Farm," Mrs. Grubb, garden, H. and C. baths, vehicles	20	By arrangement
Sandy Bay	"Eagle House," Mrs. Wright; 2 minutes from tram ...	—	By arrangement

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